

ArcGIS Pro

General Training Guide

May 2018



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THE
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WHERE™

Esri Training Courses

Overview

Because ArcGIS users have diverse educational backgrounds and workplace responsibilities, the courses below provide distinct entry points into the ArcGIS platform while also supporting a progressive approach to learning key workflows. Each course teaches knowledge and skills that will enable the staff member to move forward with ArcGIS per the capability needing to be addressed.

Instructor-led courses are typically 2-3 days in length, with a few exceptions. They may be conducted at an Esri training facility, through a virtual online classroom or held privately at a customer site. Private classes may also be followed up by a day of coaching to address the organization's specific learning requirements. *See note regarding reschedules and cancellations at the bottom of this page.

To prepare for attending an Instructor-led online event, please view this video: [Preparing to Attend Esri Instructor-led Training](#) & for instruction on how to work with digital course materials: [Using Esri's Digital Materials](#)

Options for **self-paced e-Learning** through web courses and training seminars are also listed in this document. All Esri customers with a qualifying product that is current on maintenance have unlimited access to these courses.

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: [Update My Esri Subscriptions](#) 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: www.esri.com/coursecatalog

***Note: Esri cancellation policy for instructor-led courses:** Please provide written notification to Esri's Customer Service department at service@esri.com of any student transfer, cancellation, or substitution requests 5 business days (holidays excluded) before the scheduled start date of the class. Please see Esri Terms & Conditions for more information.

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LEARN THE BASICS OF ARCGIS PRO - ESRI QUICK TUTORIALS

The ArcGIS Pro quick-start tutorials show key functionality and walk you through meaningful workflows. The tutorials will help familiarize you with ArcGIS Pro concepts, such as storing your work in projects, using the ribbon, and utilizing new tools for visualizing data. These tutorials will give you the skills to begin working with your own projects and data and start using ArcGIS Pro like a pro.

For quick exercises/tutorials to learn the basics about ArcGIS Pro, link to [Learn ArcGIS](#) In these lessons, travel to Venice with ArcGIS Pro. *To complete exercises, you will need ArcGIS Pro 2.1 and ArcGIS Spatial Analyst.*

Esri also offers additional tutorials for ArcGIS Pro in the [Lesson Gallery](#) (search for ArcGIS Pro lessons) and through [Quick-Start Tutorials](#) - listed below:

Learn the Basics

- [Introducing ArcGIS Pro](#) (25 minutes)
- [Create a Project](#) (10 minutes)
- [Navigate Maps and Scenes](#) (10 minutes)
- [Add Data to a Project](#) (20 minutes)
- [Explore Your Data](#) (45 minutes)
- [Create a Project Template](#) (20 minutes)
- [Import an ArcMap Document](#) (20 minutes)

Visualize

- [Convert a Map to a Scene](#) (25 minutes)
- [Symbolize Map Layers](#) (30 minutes)
- [Label your Map](#) (25 minutes)
- [Share a Web Map](#) (20 minutes)
- [Make a Layout](#) (45 minutes)

Analyze

- [Use Geoprocessing Tools](#) (45 minutes)
- [Make a Geoprocessing Model](#) (45 minutes)

Manage and Edit Data

- [Create Points on a Map](#) (30 minutes)
- [Create Points from a Table](#) (45 minutes)

INSTRUCTOR-LED TRAINING

FOUNDATION

If you are new to GIS and just getting started with ArcGIS Pro...

ARCGIS PRO: ESSENTIAL WORKFLOWS

Instructor-led: 3-days

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.

If you are familiar with ArcMap and need to learn how basic desktop activities are accomplished using ArcGIS Pro...

MIGRATING FROM ARCMAP TO ARCGIS PRO

Instructor-led: 2 days

This course introduces the essential ArcGIS Pro terminology you need to understand and prepares you to be productive right away. You will learn how to efficiently complete a variety of tasks related to mapping, editing, analyzing, and sharing data, maps, and other geospatial resources.

For GIS Managers or those looking to understand the modern ArcGIS approach to business challenges...

PUTTING ARCGIS TO USE ACROSS YOUR ORGANIZATION

Instructor-led: 3 days

Get a comprehensive introduction to ArcGIS platform components and capabilities. In this course, you explore ArcGIS apps used for mapping and visualization, data collection and management, spatial analytics, and collaboration and sharing. Discover how the ArcGIS platform helps organizations address common business challenges and apply location-based insights to streamline operations and improve decision making.

MANAGING GEODATA

For anyone who needs to understand how to create and work with a geodatabase from ArcGIS Pro...

MANAGING GEOSPATIAL DATA IN ARCGIS

Instructor-led: 2 days

This course takes you on an in-depth exploration of the geodatabase, the native data storage format for ArcGIS software. Best practices to create a geodatabase to centrally store and efficiently manage your organization's authoritative geospatial data are covered. You will develop skills needed to configure unique geodatabase features that ensure data integrity and accuracy over time and a thorough understanding of file and enterprise geodatabase capabilities.

CREATING AND EDITING GEODATA

For Data Editors and GIS Professionals (technical leads) needing to learn how to edit data with ArcGIS Pro

CREATING AND EDITING DATA WITH ARCGIS PRO

Instructor-led: 2 days

This course teaches best practices to create accurate geographic data and maintain it over time. You will get ample hands-on practice with a variety of ArcGIS Pro tools that streamline the editing process and decrease the potential for errors when updating your GIS database.

GIS Professionals responsible for setting up field data collection systems and understanding how to map the data collected will greatly benefit from this course

FIELD DATA COLLECTION AND MANAGEMENT USING ARCGIS

Instructor-led: 2 days

Learn how ArcGIS supports a complete field data management workflow—from the office to the field, in the field, and back to the office. You will learn best practices to configure and deploy ArcGIS field-productivity apps to meet your data-collection needs. You will have the opportunity to use your own iOS or Android device to complete some course exercises.

This course is targeted for GIS Professionals, Web Administrators and Application Developers responsible for understanding how to devise a sharing strategy the supports the organization.

SHARING GIS CONTENT USING ARCGIS

Instructor-led: 2 days

Learn how to efficiently share a variety of geospatial resources to an ArcGIS Online organizational site or ArcGIS Enterprise portal website. This course teaches how to publish high-performing services that extend ArcGIS mapping and analytics capabilities across your organization.

SPATIAL ANALYSIS

SPATIAL ANALYSIS WITH ARCGIS PRO

Instructor-led: 3 days

Learn essential concepts and a standard workflow you can apply to any spatial analysis project. You will work with a variety of ArcGIS tools to explore, analyze, and produce reliable information from data. Course exercises use an Advanced license of ArcGIS Pro and ArcGIS 3D Analyst, ArcGIS Spatial Analyst, and ArcGIS Geostatistical Analyst.

INDUSTRY FOCUSED COURSES USING ARCGIS PRO

For all staff in a public safety role who need to learn and work in GIS.

USING ARCGIS FOR PUBLIC SAFETY WORKFLOWS

Instructor-led: 2 days

This course introduces ArcGIS software and a geographic approach that complements and enhances typical public safety workflows. You will work with tools to map and visualize public safety data, identify patterns, create actionable information, and produce dynamic maps to effectively disseminate that information. This course uses realistic public safety scenarios.

ARCGIS ANALYSIS WORKFLOWS FOR PUBLIC SAFETY

Instructor-led: 2 days

Explore realistic scenarios as you learn a standard analysis workflow that will provide deeper insight into how location impacts public safety incidents, trends, and operations. Working primarily with ArcGIS Pro, you will explore tools and techniques to visualize and quantify public safety data, then share your analysis results using easy-to-understand maps and apps. This course is ideal for crime analysts and other public safety professionals in law enforcement, homeland security, emergency management, and related fields.

TRAINING SEMINARS

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: [Subscribe to Live Training Seminar Reminders](#) to receive email notification on upcoming events.

LEARN THE BASICS

[Going Pro: ArcGIS Pro Essentials for ArcMap Users](#) (June 2017)

MANAGE AND EDIT

[ArcGIS Pro Editing Essentials](#) (December 2017)

ANALYZE

[ArcGIS Pro: Analysis and Geoprocessing Essentials](#) (May 2018)

[Finding Optimal Locations: Suitability Modeling in ArcGIS Pro](#) (February 2017)

[Space Time Pattern Mining: A New Frontier in Spatial Analysis](#) (September 2016)

[Modeling the Unknown: Spatial Interpolation with ArcGIS Pro](#) (May 2016)

[Going Deeper with Data Analytics Using ArcGIS Pro and R](#) (August 2017)

IMAGERY AND REMOTE SENSING

[Streamline Imagery Workflows with Drone2Map for ArcGIS](#) (November 2016)

[Dynamic Image Processing in ArcGIS Pro](#) (June 2016)

VISUALIZE, COLLABORATE AND SHARE

[Create and Share ArcGIS Pro Tasks](#) (August 2015)

[Drawing Millions of Features in ArcGIS: Advanced Techniques](#) (February 2016)

[Using Multidimensional Scientific Data with ArcGIS](#) (March 2016)

DEVELOPER

[Building 3D Web Apps with ArcGIS API for JavaScript \(Using ArcGIS Pro\)](#) (November 2016)

[Extend ArcGIS Pro Functionality with Add-ins](#) (April 2016)

[Building ArcGIS Pro Add-ins and Solution Configurations](#) (October 2017)

SPECIALITY SOLUTIONS AND EXTENSIONS

[Get to Know ArcGIS Utility Network Management](#) (March 2018)

[Simplify Data Management with ArcGIS Workflow Manager](#) (February 2017)

WEB COURSES

Web Courses are self-paced e-Learning that 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

LEARN THE BASICS

[Getting Started with ArcGIS Pro](#) - To complete exercises, you will need ArcGIS Pro 1.2 - 2.1 (Basic, Standard & Advanced) & ArcGIS Online User Privileges. Some optional exercise steps may require the 3D Analyst, the Geostatistical Analyst, or the Spatial Analyst extension.

[Automating Workflows Using ArcGIS Pro Tasks](#) - To complete exercises, you will need ArcGIS Pro 1.3 - ArcGIS Pro 2.0 (Basic, Standard or Advanced)

MANAGE, EDIT AND INTEGRATE GEODATA

[Getting Started with the Geodatabase](#) - To complete exercises, you will need ArcGIS Desktop 10.3, 10.4, or 10.5 (Basic, Standard or Advanced) - Note: One exercise requires the use of Standard or Advanced license of ArcGIS - OR you may use ArcGIS Pro 2.0 (Basic, Standard or Advanced)

[Editing Basics in ArcGIS Pro](#) - To complete exercises, you will need ArcGIS Pro 2.1 (Basic, Standard, or Advanced) and ArcGIS Online Organizational Account (User role or equivalent)

[Integrating Data in ArcGIS Pro](#) - To complete exercises, you will need ArcGIS Pro 1.3 - 2.0 (Basic, Standard or Advanced); ArcGIS Online Organizational Account (User role or equivalent)

VISUALIZE

[Labeling Features Using ArcGIS Pro](#) - To complete exercises, you will need ArcGIS Pro V1.3 - 2.0 (Basic, Standard or Advanced); ArcGIS Online Organizational Account (User role or equivalent)

[Displaying Data in ArcGIS Pro](#) - To complete exercises, you will need ArcGIS Pro V1.4 - 2.1 (Basic, Standard or Advanced); ArcGIS Online Organizational Account (User role or equivalent)

[Managing Map Layers in ArcGIS Pro](#) - To complete exercises, you will need ArcGIS Pro V1.4 - 2.1 (Basic, Standard or Advanced); ArcGIS Online Organizational Account (User role or equivalent)

[Creating and Sharing Animation in ArcGIS Pro](#) - To complete exercises, you will need ArcGIS Pro 1.3 - 2.0 (Basic, Standard or Advanced); ArcGIS Online Organizational Account (User role or equivalent)

[Creating Vector Tiles in ArcGIS Pro](#) - To complete exercises, you will need ArcGIS Pro V1.4 (Basic, Standard or Advanced); ArcGIS Online Organizational Account w/Publisher Role. <1 Credit will be consumed based on current credit rates.

COLLABORATION AND SHARING

[Sharing Maps and Layers with ArcGIS Pro](#) - To complete exercises, you will need ArcGIS Pro 1.3 or 2.0 (Basic, Standard, or Advanced) & ArcGIS Online Organizational Account (Publisher Role or Equivalent - Approx. 5 credits will be consumed).

[Sharing 3D Content Using Scene Layer Packages](#) - To complete the exercises, you will need ArcGIS Pro 1.3.1, ArcGIS Pro 1.4 or ArcGIS Pro 2.0 (Basic, Standard or Advanced); 3D Analyst and ArcGIS Online (Publisher role or equivalent). 1 Credit will be consumed based on current credit rates.

[Working with NetCDF Data in ArcGIS Pro](#) - To complete exercises, you will need ArcGIS Pro 1.3 or ArcGIS Pro 2.0 (Basic, Standard or Advanced), ArcGIS Spatial Analyst and ArcGIS Online (User Role or equivalent).

ANALYZE

[Preparing to Perform Analysis Using ArcGIS Pro](#) - To complete exercises, you will need ArcGIS Pro 1.3 - 2.0 (Basic, Standard or Advanced); ArcGIS Online Organizational Account (User role or equivalent)

[Querying Data Using ArcGIS Pro](#) - To complete exercises, you will need ArcGIS Pro 1.3 - 2.0 (Basic, Standard or Advanced); ArcGIS Online Organizational Account (User role or equivalent)

[Building Geoprocessing Models Using ArcGIS Pro](#) - To complete exercises, you will need ArcGIS Pro 1.3 - 2.0 (Advanced); ArcGIS Online Organizational Account (User role or equivalent)

[Introduction to Regression Analysis Using ArcGIS Pro](#) - To complete the exercises, you will need ArcGIS Pro V1.4 - 2.1 (Basic, Standard, or Advanced); ArcGIS Online Organizational Account (User role or equivalent); ArcGIS Geostatistical Analyst and ArcGIS Spatial Analyst.

[Terrain Analysis Using ArcGIS Pro](#) - To complete the exercises, you will need ArcGIS Pro 1.2 - V1.4 (Basic, Standard, or Advanced); ArcGIS Online Organizational Account (User role or equivalent) and ArcGIS Spatial Analyst.

[Creating an Origin-Destination Cost Matrix in ArcGIS Pro](#) - To complete the exercises, you will need ArcGIS Desktop, ArcGIS Pro 1.3 and Network Analyst.

[Distance Analysis Using ArcGIS Pro](#) - To complete exercises, you will need ArcGIS Pro 1.3 - 2.0 (Basic, Standard or Advanced); ArcGIS Online Organizational Account (User role or equivalent) and ArcGIS Spatial Analyst.

[Finding the Closest Facilities Using ArcGIS Pro](#) - To complete exercises, you will need ArcGIS Pro 1.3 - 2.0 (Basic, Standard or Advanced); ArcGIS Online Organizational Account (User role or equivalent) and ArcGIS Network Analyst.

[Generating Service Areas Using ArcGIS Pro](#) - To complete exercises, you will need ArcGIS Pro 1.3 - 2.0 (Basic, Standard or Advanced) and ArcGIS Network Analyst (Network dataset must currently be created in ArcMap).

[Finding the Optimal Location of Facilities Using ArcGIS Pro](#) - To complete exercises, you will need ArcGIS Pro V1.2 or V1.3; ArcGIS Network Analyst and ArcGIS Online Organizational Account (User role or equivalent)

[Creating Optimized Routes Using ArcGIS Pro](#) - To complete exercises, you will need ArcGIS Pro 1.3 - 2.0 (Basic, Standard or Advanced) and ArcGIS Network Analyst (Network dataset must currently be created in ArcMap).

[Optimizing Routes for Efficient Fleet Management](#) - To complete exercises, you need the following: ArcGIS Pro 2.0 (Basic, Standard or Advanced) ArcGIS Online Organizational Account (User role or equivalent)

[Performing Viewshed Analysis in ArcGIS Pro](#) - To complete the exercises, you will need ArcGIS Pro 1.3 - 2.0 (Basic, Standard, or Advanced); ArcGIS 3D Analyst and ArcGIS Spatial Analyst.

[Calculating Density Using ArcGIS](#) - To complete these exercises, you need the following: ArcGIS Pro 2.0 (Basic) and ArcGIS Spatial Analyst

[Using the R-ArcGIS Bridge](#) - Requires the following to complete exercises: ArcGIS Pro 1.4, 2.0 or 2.1 (Basic, Standard, or Advanced), R 3.3.2 RStudio Desktop

[Integrating R Scripts into ArcGIS Geoprocessing Tools](#) - Requires the following to complete exercises: ArcGIS Pro 1.4, 2.0 or 2.1 (Basic, Standard, or Advanced), R 3.3.2 RStudio Desktop

3D GIS

[3D Visualization Using ArcGIS Pro](#) - To complete exercises, you will need ArcGIS Pro 1.4 or 2.0 (Basic, Standard, or Advanced); ArcGIS Online Organizational Account (User role or equivalent) as well as Adobe Reader or other PDF reader software to view exports from ArcGIS Pro.

[Editing 3D Features Using ArcGIS Pro](#) - To complete the exercises, you will need ArcGIS Pro V1.4, 2.0 or 2.1 (Basic, Standard, or Advanced); ArcGIS Online Organizational Account (User role or equivalent)

[Performing Line of Sight Analysis](#) - To complete exercises, you will need ArcGIS Pro 1.3 - 2.0 & ArcGIS 3D Analyst.

IMAGERY AND REMOTE SENSING

[Displaying Raster Data Using ArcGIS Pro](#) - To complete exercises, you will need ArcGIS Pro 1.2 - V1.4 OR ArcGIS Pro 2.0, ArcGIS Online Organizational Account (User role or equivalent).

[Processing Raster Data Using ArcGIS Pro](#) - To complete exercises, you will need ArcGIS Pro 1.4, 2.0 or 2.1 (Standard or Advanced) & ArcGIS Spatial Analyst.

[Change Detection Using Imagery](#) - To complete exercises, you will need ArcGIS Pro 1.4 or ArcGIS Pro 2.0 (Advanced) & ArcGIS Spatial Analyst.

DEVELOPER

[Building Geoprocessing Models Using ArcGIS Pro](#) - To complete the exercises, you will need ArcGIS Pro 1.3 - 2.0 Advanced & ArcGIS Online Organizational Account - User Role.

[Creating Python Scripts for Raster Analysis](#) - To complete exercises, you will need ArcGIS Pro 1.4 - 2.0 (Standard or Advanced) and ArcGIS Spatial Analyst OR ArcGIS Pro 2.1 (Standard or Advanced), ArcGIS Spatial Analyst and ArcGIS Online Organizational Account (User role or equivalent).

ADDITIONAL RESOURCES

From Esri Press:



[Getting to Know ArcGIS Pro](#); ISBN: 9781589484573 - 478 pages. Published in 2016; \$84.99

[Getting to Know Web GIS, 2nd edition](#); ISBN: 9781589484634 - 409 pages, Published in 2016; \$84.99

What can you do with ArcGIS Pro? For those who are new to the app - you can learn more on Esri's website, beginning here: [The Foundation for Your GIS - ArcGIS Pro](#)

New 23-page [Getting Started with ArcGIS Pro Guide](#) - A quick start guide to downloading, installing, and licensing ArcGIS Pro.

Access the [ArcGIS Pro Terminology Guide](#)

[ArcGIS Pro Resources](#) - scroll down through the site for additional links and information.

In ArcGIS Pro, tools are grouped into toolsets, which are then collected into toolboxes. Go here to learn more: [ArcGIS Pro Tools](#) - there are specific toolboxes for each analysis function you are looking to perform. Go here to learn more about them: [ArcGIS Pro Toolboxes](#).

Stay in touch with [What's New](#) in ArcGIS Pro

[What Makes ArcGIS Pro So Special Blog](#)

[ArcGIS Pro Panel Discussion at User Conference 2017](#)

ESRI MASSIVE OPEN ONLINE COURSES (MOOCS) FOR 2018

To sign up for any of the MOOCs, just click the **"Register Now"** button to fill out your name and email.

DO IT YOURSELF GEOAPPS

Anyone can Build Apps on the ArcGIS Platform.

This course will show you how to combine location and narrative in one application to better communicate and broadcast your story, create custom web applications that solve problems in your community, and build powerful native applications for iOS and Android devices without touching a piece of code. The course is four weeks and requires 3-4 hours of study per week to be successful: **September 5 - October 16, 2018.**

CARTOGRAPHY

Learn from Accomplished Cartographers Using World-Class GIS.

With coaching from experienced cartographers and practical, hands-on exercises using ArcGIS Pro, you'll become a smarter mapmaker, ready to go beyond the defaults and make better maps. The course covers six weeks and requires 2-3 hours of study per week: **September 5 - October 16, 2018.**

THE LOCATION ADVANTAGE

Explore how location analytics can be used in business.

Location analytics uses the locational component of business data to improve users' understanding of their market, customers, and business processes. This MOOC explores the capabilities of Esri Business Analyst Online. The course covers six weeks and requires 1-2 hours of study per week. No additional classes scheduled in 2018.

EARTH IMAGERY AT WORK

See why imagery is information.

Digital images of earth's surface produced by remote sensing are the basis of modern mapping. They are also used to create valuable information products across a spectrum of industries. This MOOC is for everyone who is interested in applications of earth imagery to increase productivity, save money, protect the environment, and even save lives: **October 31 - December 11, 2018.**

GOING PLACES WITH SPATIAL ANALYSIS

Gain a deeper understanding of spatial data analysis.

This MOOC is for people who know something about data analysis and want to learn about the special capabilities of spatial data analysis. You'll get free access to the full analytical capabilities of ArcGIS Online, Esri's cloud-based GIS platform. This course requires six weeks and requires 2-3 hours of study per week. As this course is being revised, the only class scheduled for 2018 is **October 31 - December 11, 2018.**

For additional information on Esri's MOOC Program - go here: <http://www.esri.com/mooc>