

2024

# Esri Training Course Catalog

Discover the latest instructor-led courses and training solutions for organizations using ArcGIS software.



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## Connect with Esri Training

Web: [esri.com/training](http://esri.com/training)

Email: [GISTraining@esri.com](mailto:GISTraining@esri.com)

Phone: 800-447-9778, ext.1-5757

Esri Community: [go.esri.com/training-community](http://go.esri.com/training-community)

Twitter: [@EsriTraining](https://twitter.com/EsriTraining)

## International Training

Esri training is offered worldwide through our distributor network.

Outside the United States, contact your local Esri distributor for course offerings and class schedules. Find the Esri distributor near you at [esri.com/distributors](http://esri.com/distributors).



Dear Colleague:

Today's ArcGIS® software allows organizations to leverage geographic information system (GIS) technology at scale—with rich content and advanced tools for mapping and analytics that help professionals, like yourself, solve problems holistically.

Esri instructor-led training provides the foundation you need to learn how to build a strong geospatial infrastructure and fully leverage your GIS investment. Staying current with the latest technology will help you solve the challenges facing your organization and our world by applying a data-driven, geographic approach to increase understanding, collaboration, and actionable insights.

I encourage you to review Esri's learning opportunities and register for a course today.

Warm regards,

A handwritten signature in black ink that reads "Jack Dangermond".

Jack Dangermond

# About Esri Training Options

Developed and delivered by in-house experts, Esri's instructor-led and self-paced training options support GIS practitioners, non-GIS professionals, and anyone who uses ArcGIS software to support their daily workflows, enhance projects with geographic context, and create information that leads to better decision-making.

## Self-Paced E-Learning Resources

Esri's large collection of self-paced e-Learning resources supports those who need immediate, just-in-time training as well as ongoing skills development. Hundreds of web courses, training seminars, videos, tutorials, and learning plans that cover GIS concepts and ArcGIS topics are available on demand at Esri Academy ([esri.com/training](http://esri.com/training)).

Additionally, no-cost massive open online courses (MOOCs) offer a supported self-paced environment to learn popular technology topics over four to six weeks. View course details and the MOOC schedule at [esri.com/mooc](http://esri.com/mooc).

**Unlimited access means unlimited learning potential.**

Organizations that have a qualifying Esri® product with a current maintenance subscription enjoy complimentary unlimited access to all self-paced e-Learning resources at Esri Academy. To access e-Learning, learners simply sign in to Esri Academy using their ArcGIS Online organizational account or the public ArcGIS account that is connected to their organization in My Esri.



## About Esri Training Options (continued)

### Instructor-Led Training

Instructor-led courses are taught in person and online in real time. All classes incorporate proven adult-learning principles to ensure that learners acquire relevant and directly applicable knowledge and skills.

The course format includes the following:

- Interactive discussions with learners contributing real-world experiences
- Demonstrations and hands-on software exercises
- Activities and problem-solving scenarios that encourage peer-to-peer learning

In Esri's instructor-led online classroom, learners interact with one another and the instructor using virtual breakout rooms, whiteboards, chats, and polls. Instructors can shadow learners' computers to monitor progress during exercises.

### Expert instructors focus on learner success.

All Esri instructors have achieved one or more Esri technical certifications and are experts in the technology they teach. They have the flexibility to adapt how they present course material based on the audience composition, skill level, and professional interests of each class.



## Instructor-Led Pricing and Payment Options

Public instructor-led training classes held at an Esri facility or in the Esri online classroom are US\$960 per day, per student. Private training events accommodate up to 15 students who are registered and paid for at one time. For current pricing and to discuss a private training event for your staff, contact your Esri training consultant or email [GISTraining@esri.com](mailto:GISTraining@esri.com).

Employees of the US federal government are entitled to GSA pricing.

Discounts are available for the following:

- Faculty and staff of a recognized academic institution, library, or museum
- Authorized Esri partners
- Esri Nonprofit Organization Program members

Pricing is subject to change at any time.

### Payment Options

- MasterCard, Visa, American Express, and Discover
- Purchase order or government requisition
- Check, money order, or wire transfer
- Prepaid training such as Esri Training Pass, Advantage Program, and Packaged EA Programs for Government

For policies regarding payment options, review the Esri Training Terms and Conditions at [esri.com/trainingterms](http://esri.com/trainingterms).

# Instructor-Led Registration Information

## Select Your Course

Go to [esri.com/coursecatalog](http://esri.com/coursecatalog) to view schedules for instructor-led courses taught in Esri training centers and online. For more information on course availability or for course recommendations, please contact an Esri training consultant at [GISTraining@esri.com](mailto:GISTraining@esri.com) or 1-800-447-9778, extension 1-5757.

## Register

A registration application is required for each student. We recommend that you register at least one month prior to the class, since applications are processed on a first come, first served basis. Here's how to register:

- On the Esri Training Website—Once you've selected your course, click Register and complete the online registration form. You will be asked to submit payment information through our secure online system.
- By Fax or Mail—Download and complete a registration application, which you can fax or mail to Esri. Directions are on the form.

Online registrations will be acknowledged within two business days. Phone, mail, and fax registration applications will be acknowledged via email. Registrations will not be confirmed until payment is received. Classes will be confirmed a minimum of 10 business days prior to the scheduled start date. Please keep this in mind when purchasing nonrefundable airline tickets.

## Payment

To complete your registration, proof of payment is required. Mail payment and a copy of your registration form to Esri, File #54630, Los Angeles, CA 90074-4630.

## Transfers and Substitutions

Student substitutions (filling a student's place with another person from the same organization) are allowed under certain conditions. Requests to cancel, transfer, or substitute a class registration must be received at least three business days in advance of the class start date. Please refer to Esri Training Terms and Conditions found at [esri.com/trainingterms](http://esri.com/trainingterms).

## Schedule Changes and Cancellations

It is sometimes necessary to change the dates on which a class is offered or to cancel a class. In this case, students will be notified by phone and email as soon as possible and not less than 10 days prior to the scheduled start of the class.

## Travel, Lodging, and Meals

Esri is not responsible for student travel arrangements and assumes no responsibility for losses from nonrefundable travel arrangements, including, but not limited to, airfare, lodging, or transportation to and from the training site, due to schedule changes. Training location maps, including local hotels and airports, are provided to registrants. Meals are not provided by Esri. Students can access a training location map with a list of area hotels at [esri.com/trainingmaps](http://esri.com/trainingmaps).

## Course Materials

Instructor-led courses include a student workbook and exercise data. Esri provides all software and hardware that is used in class unless otherwise noted in a course description.

# Training Options for Organizations

Having the right set of workforce skills in place is essential to achieve and sustain intended results from technology. Esri offers flexible solutions to help organizations leverage their most valuable asset—their people—to make a bigger impact with ArcGIS.

We can partner with your organization to

- Onboard new GIS users and continuously grow ArcGIS skills, productivity, and confidence.
- Prepare teams for new GIS deployments and projects.
- Expand the use and business benefits of ArcGIS across your organization.

For more information about any of Esri's training options for organizations, call 1-800-447-9778, extension 1-5757, or email [GISTraining@esri.com](mailto:GISTraining@esri.com).

## Train your team members together in a private event.

When multiple staff members will benefit from the same course, arranging a private training event is a cost-effective solution. We can send an instructor to your facility, you can hold a class at one of our facilities,\* or your team members can attend the instructor-led online classroom together.

## Get the most out of your group learning experience with coaching.

When you hold a private training event, you can supplement the class with one or more days of client coaching. Client coaching enhances the learning experience by providing extra instructor time to review and practice course concepts in the context of your organization's specific workflows.

## Streamline skills development with the Esri Training Pass.

The Esri Training Pass makes it easy to secure the right training at the right time to support your ArcGIS software-enabled workflows and initiatives. With the Training Pass, you purchase training days in advance

and redeem them as needed for classes and other training products throughout the term. For more information or to make a purchase, contact your Esri training consultant or go to [go.esri.com/trainingpass](http://go.esri.com/trainingpass).

## Unleash the potential of your workforce with a strategic development plan.

Aligning workforce training with your organization's mission and goals helps to gain the executive support needed to grow and sustain your GIS program. Your Esri training consultant is available to discuss the following:

- Your GIS workflows, key roles, and vision for the future
- Solutions to continually grow skills and enable teams to be productive quickly
- Curated learning resources to support ArcGIS users of all levels
- Methods to document and share the strategic business impact of your GIS program and workforce

Your training consultant will help you create an actionable plan that prepares each role to successfully apply GIS capabilities and builds your team's capacity to improve operations and deliver insight using ArcGIS. Go to [go.esri.com/workforce-development](http://go.esri.com/workforce-development) to connect with a training consultant.

## Leverage your enterprise learning infrastructure.

For organizations that prefer to manage workforce training using their own enterprise learning management system (LMS), Esri Academy LMS Integration is an ideal solution. With this subscription-based product, your learners enjoy seamless access to Esri web courses, ArcGIS labs, training seminars, and videos from within your organization's LMS, and managers track learner progress and accomplishments just as they do for other professional development and training courses. For more information, contact your Esri training consultant or go to [go.esri.com/esri-lms](http://go.esri.com/esri-lms).



## Training Options for Organizations (continued)

### Craft a strategy to meet or exceed your ArcGIS adoption goals.

Organizations that are deploying new technology achieve better results when they consider the impact to their workforce, solicit the perspective of impacted staff and their managers, and address everyone's information and training needs.

Esri's people-focused adoption strategy solutions help organizations proactively

- Ensure that sponsors are in place and understand their critical role in successful adoption.
- Cultivate a network of change influencers and champions at all levels.
- Engage everyone with a robust communications stream that addresses the information needs of each group of users with powerful messaging that answers their questions and creates excitement about the improvements enabled by new technology.

Esri adoption strategy consultants are Prosci® certified and have extensive experience working on ArcGIS implementation projects. The result is a wealth of understanding about the specific people challenges that organizations may face when modernizing and expanding their geospatial capabilities and the most effective strategic and tactical activities to increase the pace of ArcGIS adoption.

To view adoption strategy examples and resources, visit [go.esri.com/adoption](http://go.esri.com/adoption).

“Change management is [not only] a solid framework, but it also gives us flexibility to innovate and address unique situations in our GIS environment. It’s exactly in tune with what a successful GIS ecosystem should be: **flexible and innovative.**”

—Anika-Aduesa I. Smart, Los Angeles County Metropolitan Transportation Authority



## Esri Technical Certification

The Esri Technical Certification Program validates knowledge and skills applying GIS concepts, ArcGIS Pro, ArcGIS Online, ArcGIS Enterprise, and focused technology products related to ArcGIS.

For first-time job seekers, established professionals, and those forging a new path after years in the workforce, the process to achieve an Esri technical certification hones time management, analytic, and problem-solving skills. Together with proven technical expertise, these skills build credibility with decision-makers and hiring managers.

For organizations that rely on Esri technology, certification simplifies the hiring process by helping hiring managers quickly identify qualified candidates for key technical positions. Supporting professional development with certification is a valuable tool to motivate and retain talented team members.

Exams are available at the Foundation, Associate, and Professional levels to support individuals with varying levels of GIS and ArcGIS software experience. View available exams, detailed exam information, and pricing at [esri.com/certification](http://esri.com/certification).

“Becoming Esri certified has been immensely beneficial to my professional journey. It has **expanded my knowledge and broadened my career opportunities**, as well as provided a great boost of confidence, encouraging me to explore new avenues of growth”

—Rory McPherson, Principal GIS Analyst (Esri certified)

“By earning my Esri certification, I have been able to increase the credibility of my GIS knowledge and now I can continue to share my knowledge with professionals across organizations with even greater confidence. It also demonstrated to my main employer that I am dedicated and experienced in the GIS field, and it has greatly **improved my professional development**.”

—Sona Guliyeva, GIS Trainer (Esri certified)

# All Courses by Topic

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### ArcGIS Online: Essential Workflows

One day (8 hours)

Prerequisite: None

#### Overview

This course introduces web maps, apps, and other authoritative content that may be available through your ArcGIS Online organizational site. You will learn how to discover, use, create, and share content that infuses projects with geographic context, additional business intelligence, and visual impact. Course concepts also apply to ArcGIS Enterprise portals.

#### Who Should Attend

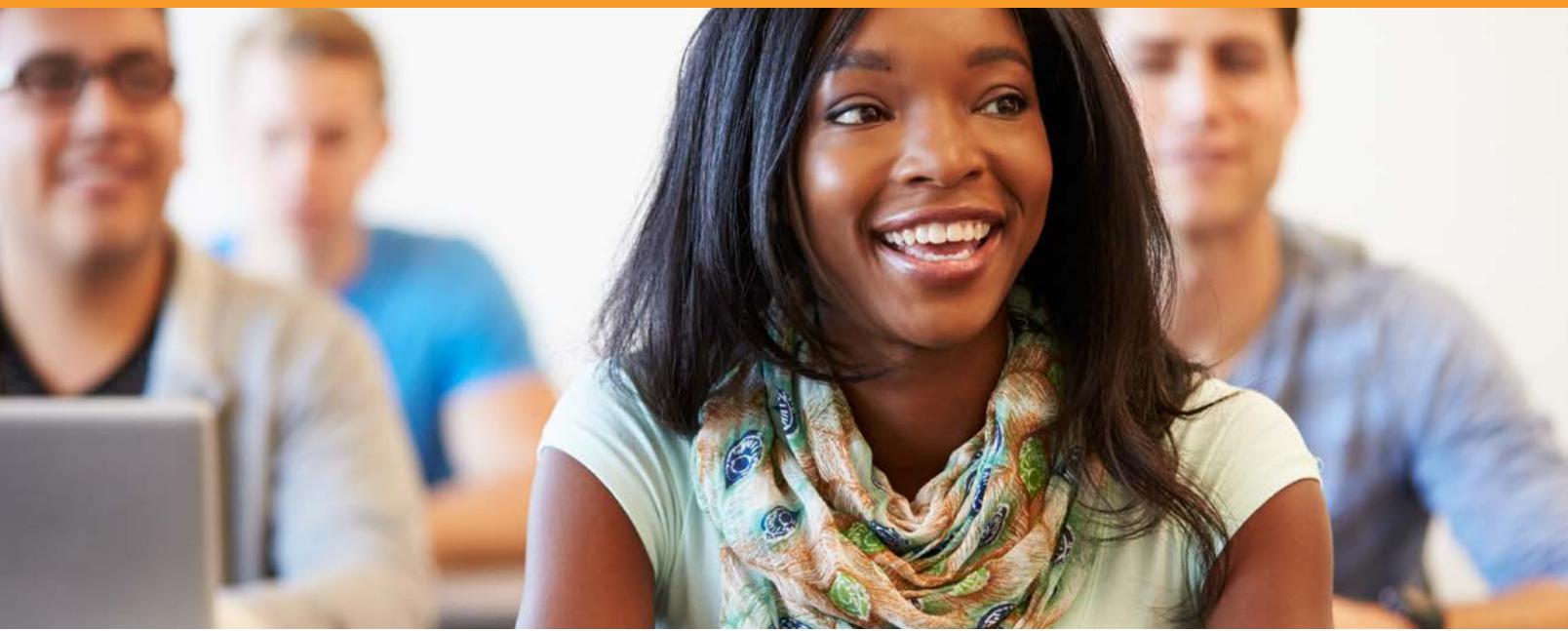
Knowledge workers, managers, and other professionals who have access to an ArcGIS Online organizational site

#### Learn How To

- Find content on an ArcGIS Online organizational site that meets your project needs.
- Create and style a web map.
- Style and configure a web app.
- Use web maps in Microsoft Office applications.
- Share maps and other content on your ArcGIS Online organizational site.

**"The course was **very relevant** to my daily work tasks."**

—Marissa Winship, ArcGIS Online: Essential Workflows



### Introduction to GIS Using ArcGIS

Two days (16 hours)

Prerequisite: None

#### Overview

Learn fundamental concepts that underlie GIS technology and geographic data. In this course, you will work with GIS maps in ArcGIS Online and ArcGIS Pro to explore real-world features; analyze data to answer questions and create new information; and share maps, data, and other resources throughout your organization.

#### Who Should Attend

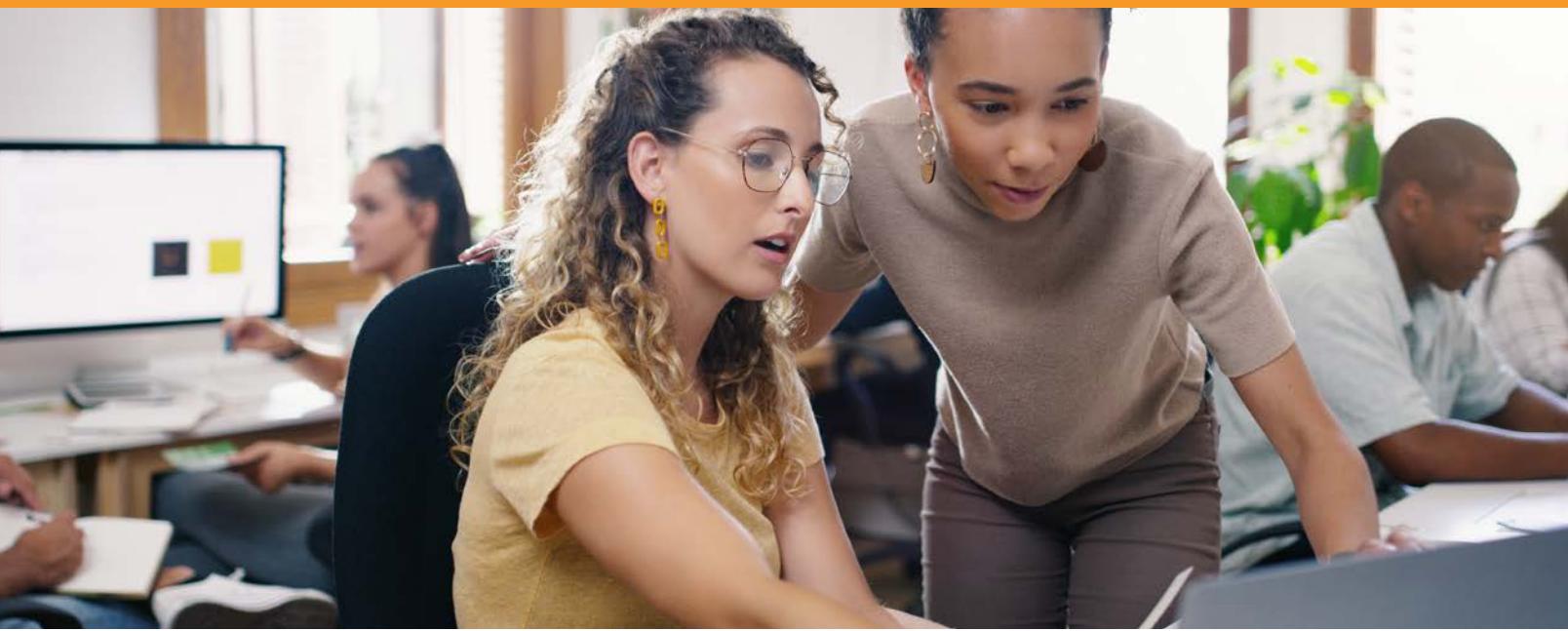
Individuals with limited or no previous GIS or ArcGIS experience

#### Learn How To

- Identify data to support a mapping project.
- Create a map, add data to it, and symbolize map features to support the map's purpose.
- Share data, maps, and other content to an organizational portal.
- Analyze map features within an area of interest.

“I thought this was a really nice overview of **ArcGIS capabilities**. I got to see and practice with a lot of tools that I’ve never even thought about using before, so that was exceptionally valuable!”

—L. Lynn Marquez, Introduction to GIS Using ArcGIS



### ArcGIS Pro: Essential Workflows

Three days (24 hours)

Prerequisite: Introduction to GIS Using ArcGIS

#### Overview

Extend your foundational GIS knowledge, get comfortable with ArcGIS Pro, and explore some of the most common GIS workflows. This course introduces techniques and general best practices to map, manage, analyze, and share data and other GIS resources. Hands-on exercises provide the experience needed to efficiently work with ArcGIS Pro.

#### Who Should Attend

GIS staff and individuals with introductory-level knowledge of GIS concepts and limited ArcGIS experience

#### Learn How To

- Organize, create, and edit geographic data to keep it accurate and up to date.
- Manage, symbolize, and label map layers.
- Analyze and model GIS data to solve spatial problems.
- Share maps and analysis results.

“Very happy with this training! I feel **much more prepared** and knowledgeable in GIS software, more **marketable for my field**, and am very excited to apply this [in] my future conservation work.”

—Catherine Atwood, ArcGIS Pro: Essential Workflows



### Migrating from ArcMap to ArcGIS Pro

Two days (16 hours)

**Prerequisite:** This course assumes significant ArcMap experience. If you have no previous ArcMap experience, take ArcGIS Pro: Essential Workflows instead of this course.

#### Overview

With faster tools and integrated 2D and 3D capabilities, ArcGIS Pro will streamline your GIS projects. This course prepares experienced ArcMap users to be productive right away. Learn essential ArcGIS Pro terminology and concepts and how to efficiently complete a variety of tasks related to mapping, editing, analyzing, and sharing geospatial data and resources.

#### Who Should Attend

Experienced ArcMap users who need to start working with ArcGIS Pro

#### Learn How To

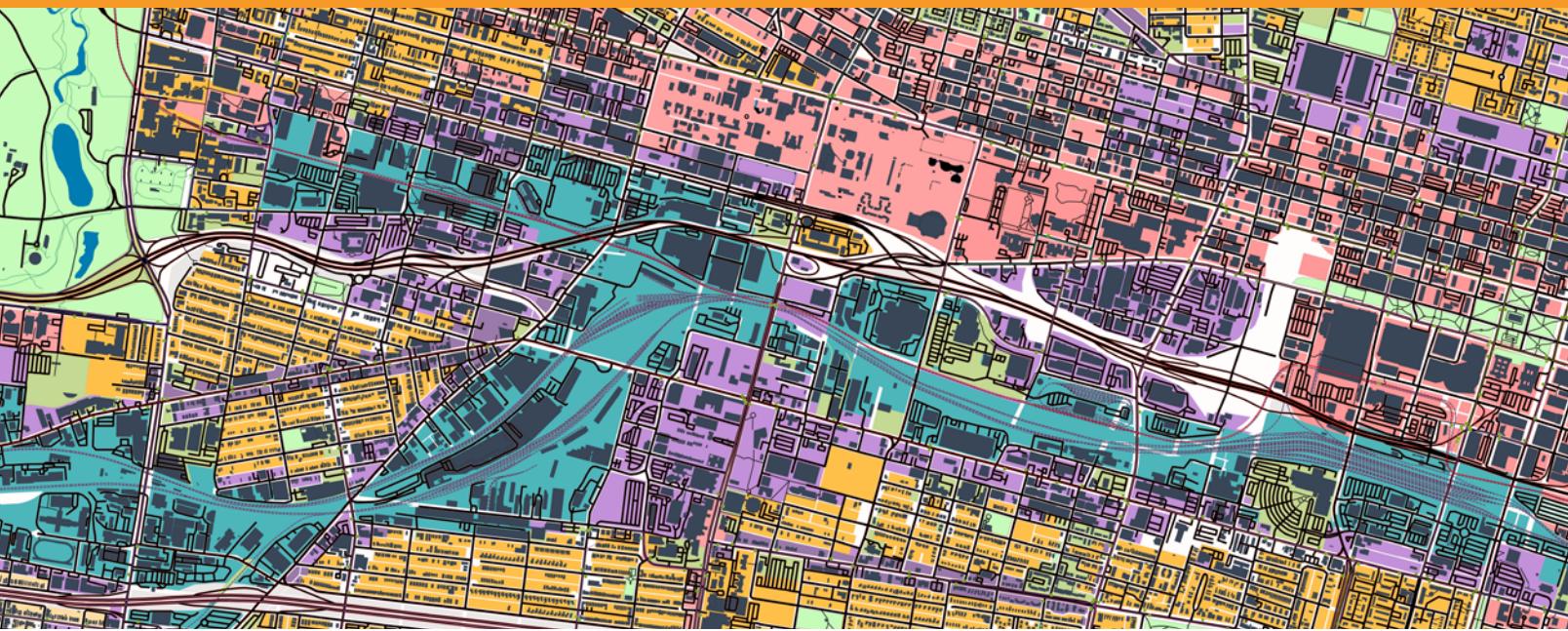
- Create an ArcGIS Pro project and import map documents.
- Import other ArcMap resources and identify potential migration issues.
- Create and modify map symbology, text, and layouts.
- Share geospatial resources to an ArcGIS Online organizational site or ArcGIS Enterprise portal.

“Top-notch, smooth class setup. It was incredibly helpful to use **real-world problems** from the variety of GIS professionals who attended.”

—Josh McCarty, Migrating from ArcMap to ArcGIS Pro

“I really enjoyed the exercises that were present in this class. Each of the topics covered **workflows** I complete in ArcMap daily. I have a very good understanding of the **functionality** of ArcGIS Pro from taking this class.”

—Sarah Beth Donaldson, Migrating from ArcMap to ArcGIS Pro



## ArcGIS Enterprise: Administration Workflows

Three days (24 hours)

Prerequisite: ArcGIS Enterprise: Configuring a Base Deployment

### Overview

Master techniques to configure and maintain an ArcGIS Enterprise solution that meets your organization's business needs. You will learn about ArcGIS Enterprise architecture, server licensing roles and extensions, and the capabilities that support common GIS patterns of use. Best practices to manage servers, data, and services while ensuring system performance over time are covered.

### Who Should Attend

IT and GIS administrators, GIS technical leads, and others who manage an ArcGIS Enterprise deployment

### Learn How To

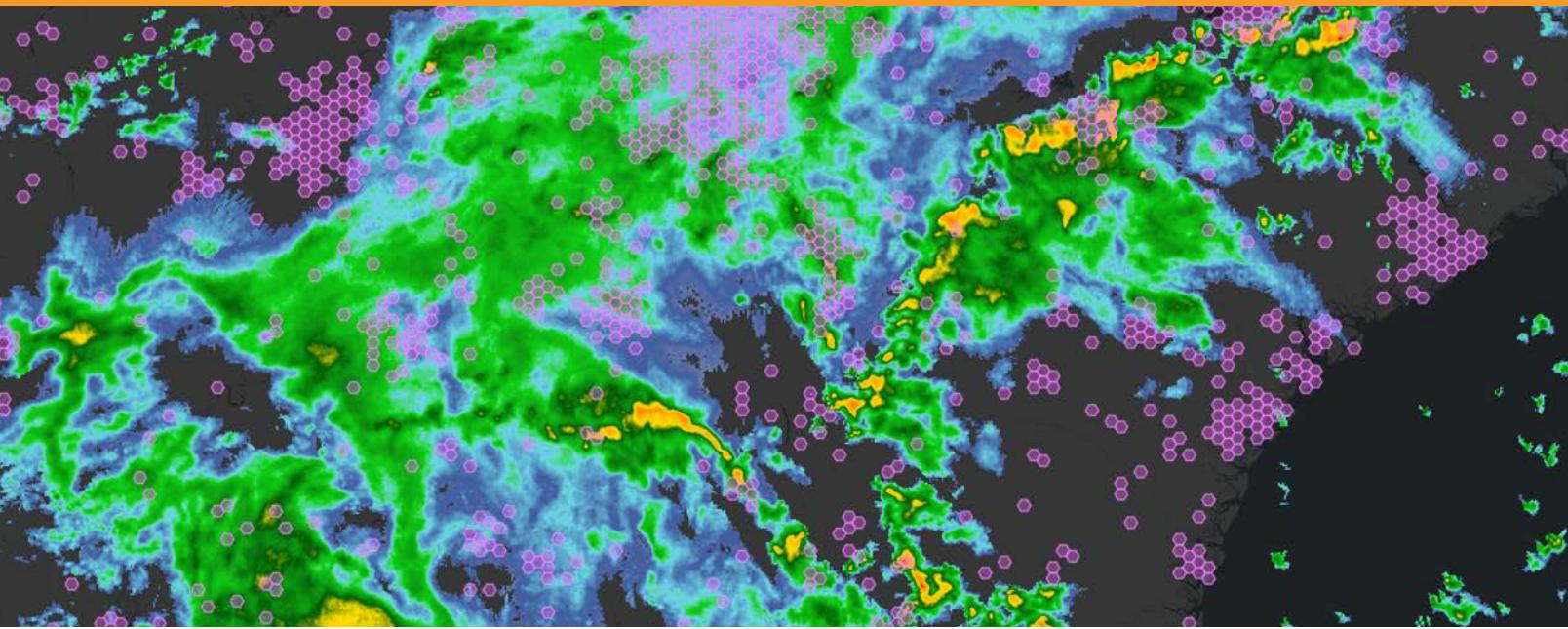
- Apply best practices to configure GIS resources and services.
- Maintain system performance using workload separation and other best practices.
- Configure distributed collaboration between multiple ArcGIS Enterprise portals.
- Use ArcGIS Notebooks and ArcGIS API for Python to automate common administrative functions.

"The exercises in this course were **particularly helpful** in seeing things in action and feeling comfortable implementing the missing pieces in my own environment at work."

—Alison Kuemmel, ArcGIS Enterprise: Administration Workflows

"**Great resources** that can be referenced long after the class is over."

—Joe McHugh, ArcGIS Enterprise: Administration Workflows



## ArcGIS Enterprise: Configuring a Base Deployment

Two days (16 hours)

Prerequisite: None

### Overview

Learn administration essentials to install and configure an ArcGIS Enterprise base deployment that enables individuals to securely access, create, and share geospatial resources. You will learn how to license and install the four software components of a base deployment and ensure system security and performance.

### Who Should Attend

IT and GIS administrators, GIS technical leads, and others who manage an ArcGIS Enterprise deployment

### Learn How To

- Install ArcGIS Server, Portal for ArcGIS, ArcGIS Data Store, and ArcGIS Web Adaptor.
- Configure an ArcGIS Enterprise portal to manage users, groups, and content-sharing privileges.
- Apply HTTPS certificates to support encrypted communication.
- Configure a suitable authentication method for your organization's needs.

"The technology used made for a great training environment. Using the different [virtual machine] environments was great to be able to **install and configure complex software** such as ArcGIS Enterprise."

—Marky Prettyman, ArcGIS Enterprise: Configuring a Base Deployment

"Perfect mix of lecture and **hands-on learning** for me!"

—Kim Nelson, ArcGIS Enterprise: Configuring a Base Deployment



### Deploying ArcGIS Enterprise on Kubernetes

Two days (16 hours)

**Prerequisite:** Familiarity with ArcGIS Enterprise deployments on Windows or Linux and experience working with the Linux command line interface are strongly recommended. Completion of ArcGIS Enterprise: Configuring a Base Deployment is also recommended.

#### Overview

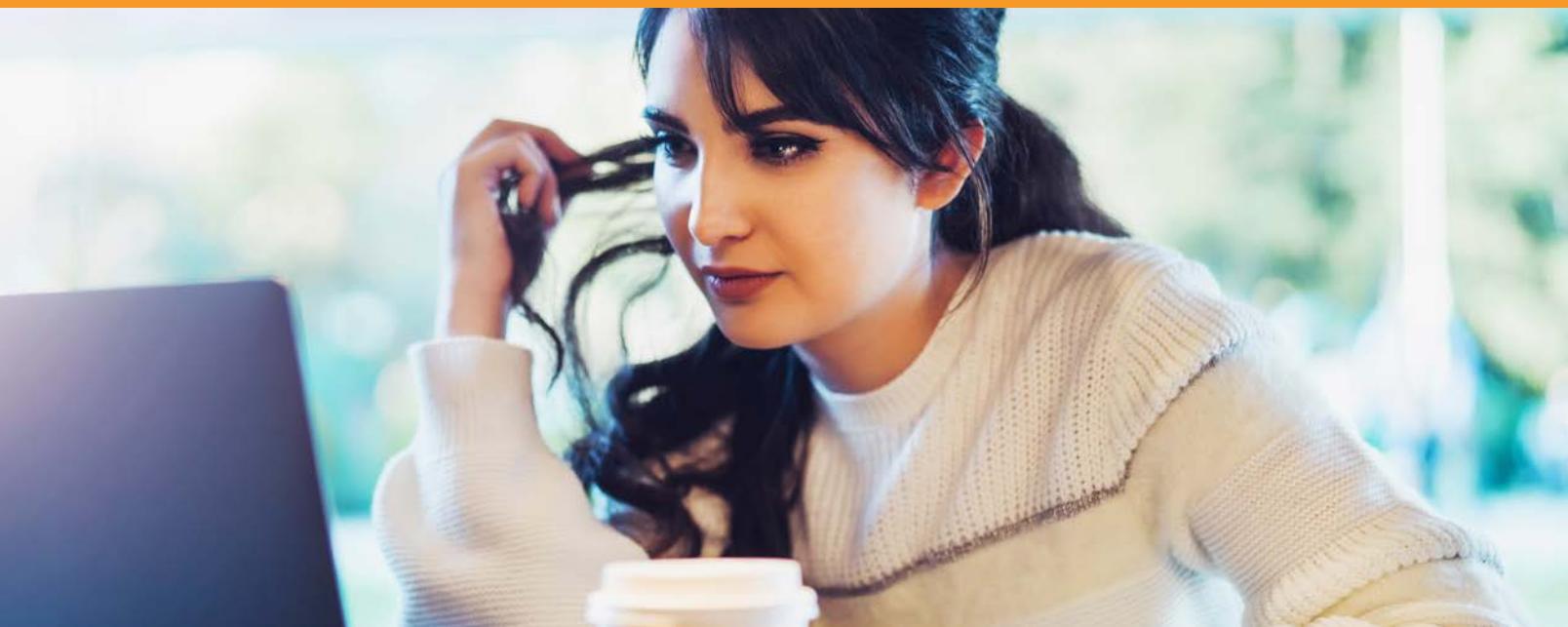
ArcGIS Enterprise on Kubernetes is a cloud-native ArcGIS Enterprise deployment option that enables organizations to efficiently deliver GIS capabilities and content and flexibly scale to meet demand while maintaining high performance. This advanced course introduces cloud-native concepts, Kubernetes tools, and key infrastructure requirements. In course exercises, you'll create and manage a new ArcGIS Enterprise on Kubernetes deployment.

#### Who Should Attend

IT and GIS administrators and other technical staff who are preparing to deploy ArcGIS Enterprise on Kubernetes

#### Learn How To

- Prepare the infrastructure needed to install and configure ArcGIS Enterprise on Kubernetes.
- Build an ArcGIS Enterprise organization using ArcGIS Enterprise Manager.
- Scale an ArcGIS Enterprise deployment using Kubernetes.
- Apply recommended workflows and troubleshooting techniques to manage GIS services and an ArcGIS Enterprise on Kubernetes deployment over time.



### Sharing Content to ArcGIS Enterprise

Two days (16 hours)

**Prerequisite:** ArcGIS Pro: Essential Workflows or Migrating from ArcMap to ArcGIS Pro

#### Overview

Web maps, apps, and other authoritative GIS resources are the lifeblood of an ArcGIS Enterprise portal website. This course covers key workflows and best practices to add resources to your portal and make them easily accessible. Get the information you need to efficiently share a variety of resources that support operational workflows, collaboration within and across business lines, and the ability of portal users to infuse their projects with location-based insight.

#### Who Should Attend

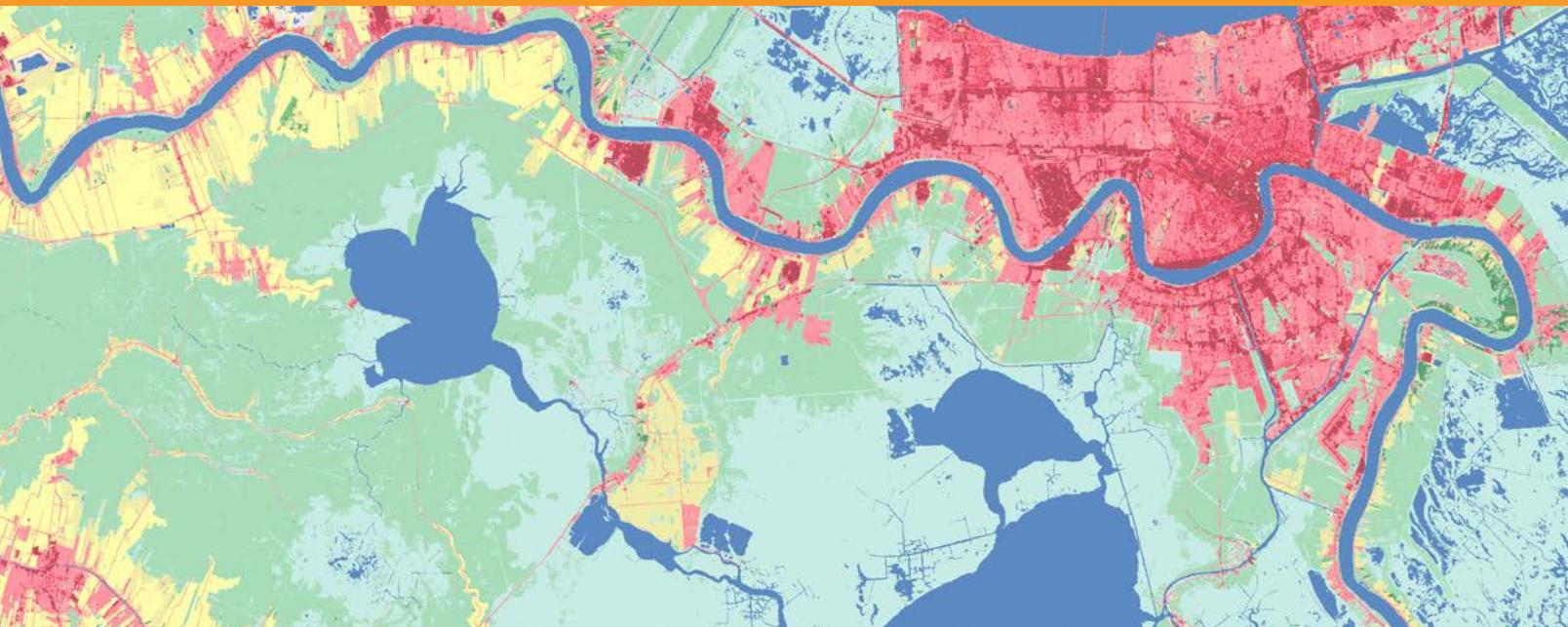
GIS professionals who need to share their authoritative content, developers who want to incorporate ArcGIS services into custom apps, and administrators who need to understand the process for publishing ArcGIS services

#### Learn How To

- Understand the role that ArcGIS Enterprise components play in managing and sharing GIS resources.
- Manage access to shared resources and create descriptive information so that portal users can easily discover resources and assess their usefulness for their projects.
- Publish maps, feature layers, vector tile layers, and other GIS resources to an ArcGIS Enterprise portal.
- Apply expert techniques to optimize maps and layers before publishing to ensure high performance and an excellent user experience.

**“I loved the exercises! They were great to put the **knowledge into practice** and further expand the **learning experience**.”**

—Shannon Veraldi, Sharing Content to ArcGIS Enterprise



### Mapping and Visualizing Data in ArcGIS

Two days (16 hours)

Prerequisite: ArcGIS Pro: Essential Workflows or Migrating from ArcMap to ArcGIS Pro

#### Overview

Learn cartographic techniques and ArcGIS Pro and ArcGIS Online workflows to create and share a variety of professional-quality information products including print maps, web maps, 3D scenes, animations, and charts.

#### Who Should Attend

Cartographers and GIS analysts, specialists, mapping technicians, and others who need to produce maps using ArcGIS software

#### Learn How To

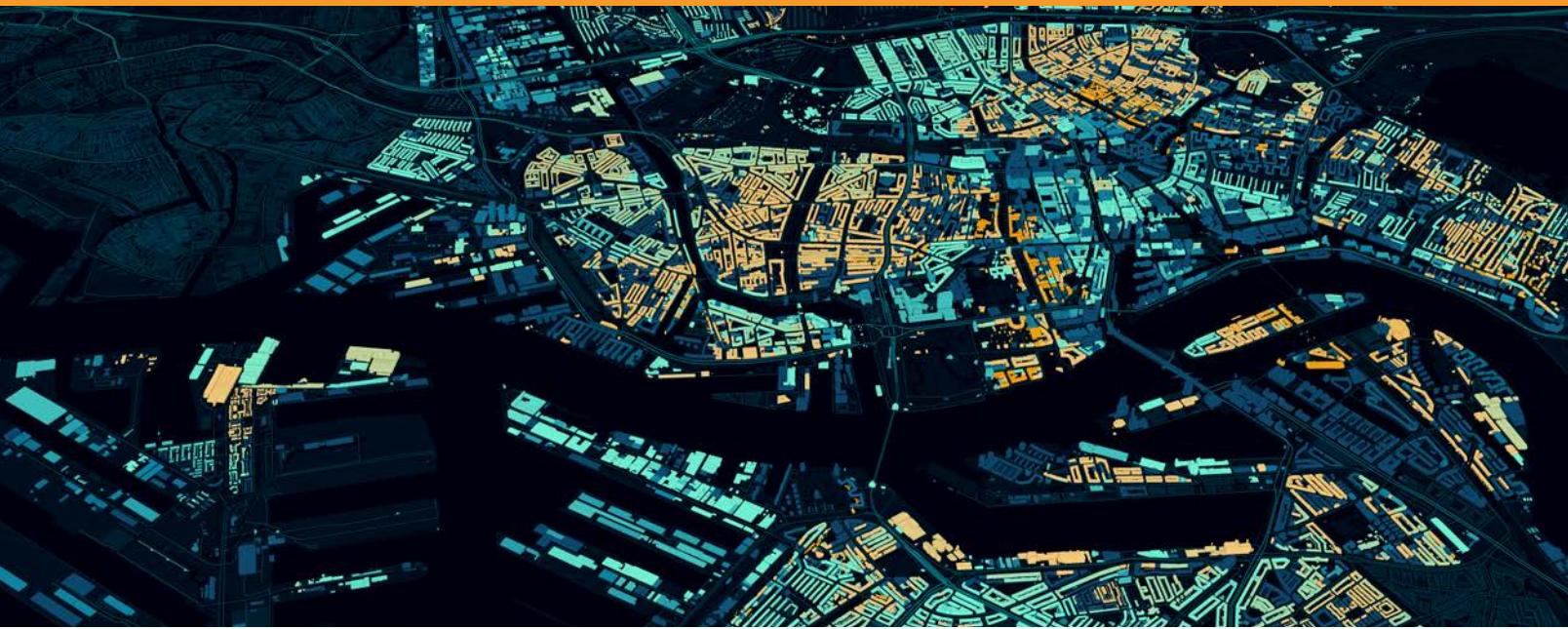
- Prepare data for a mapping project.
- Apply symbology and labeling techniques to enhance data visualization on maps and charts.
- Design print map layouts that are appropriate for your data, audience, and map purpose.
- Design web maps for use in web-based information products.
- Create and share 3D scenes and animations that enable dynamic visualization of data and change over time.

“The entire course was outstanding!”

—Steve Schwartz, Creating Maps and Visualizations with ArcGIS

“The materials and workbook were very helpful and made our practice **smooth and understandable**. I will keep the workbook and all the resources close by.”

—Christina Chavez, Creating Maps and Visualizations with ArcGIS



## Creating Stories with ArcGIS

Two days (16 hours)

**Prerequisite:** Familiarity with ArcGIS Online and web maps is recommended but not required.

### Overview

ArcGIS StoryMaps stories have achieved mass appeal as a medium to inform the public, engage project stakeholders, and inspire an audience. This course—for anyone who wants to craft interactive stories that are easy to share—teaches the concepts, best practices, and decisions that need to be made when creating and sharing a story using ArcGIS StoryMaps.

### Who Should Attend

GIS professionals and other individuals who want to share their work and disseminate information using ArcGIS StoryMaps

### Learn How To

- Design a story based on your purpose and audience.
- Add web maps, images, multimedia, and text to create a compelling story.
- Apply a theme to customize and enhance a story's visual appeal.
- Publish and share a story with the public or members of your ArcGIS organization.

**"The material was very organized and had some really great examples. I'm a hands-on person so the exercises were wonderful in allowing me to try what was taught both in the course and in the workbook. I cannot wait to use ArcGIS StoryMaps more for work and personal projects."**

—Steven Arciniega, Creating Stories with ArcGIS



### Graph Analytics Using ArcGIS Knowledge

Two days (16 hours)

Prerequisite: Prerequisite: ArcGIS Pro: Essential Workflows or Migrating from ArcMap to ArcGIS Pro

#### Overview

This course introduces foundational graph analysis concepts, terminology, and workflows to perform graph analysis using ArcGIS Knowledge. Build skills to prepare data for use in knowledge graphs and perform spatial and nonspatial analyses.

#### Who Should Attend

GIS and non-GIS analysts, researchers, data scientists, and others who need to visualize and analyze relationships among datasets stored in multiple formats

#### Learn How To

- Model data for use in ArcGIS Knowledge.
- Use ArcGIS Knowledge to load data into a knowledge graph and query the knowledge graph.
- Manage and analyze data using a knowledge graph in ArcGIS Pro.
- Visualize and share graph analysis results.



### Location Analytics Using ArcGIS Insights

Two days (16 hours)

**Prerequisite:** Familiarity with GIS concepts may be helpful. Introduction to GIS Using ArcGIS is recommended but not required.

#### Overview

Build skills to quickly identify data patterns and relationships using drag-and-drop functionality, powerful analysis tools, and interactive maps, charts, and tables. This course provides a solid grounding in ArcGIS Insights capabilities and components. Learn how to structure an analysis and dynamically visualize and analyze nonspatial and spatial data together, then share your work using attractive visual themes and repeatable analysis workflow models. Course concepts apply to all ArcGIS Insights deployment options. Attendees will use Insights desktop in course exercises.

#### Who Should Attend

GIS professionals, analysts, researchers, and others who want to dynamically visualize and analyze data

#### Learn How To

- Start an analysis project in minutes by creating an Insights workbook; connecting to data sources, including spreadsheets and relational databases; location-enabling tabular data, and visualizing data relationships on interactive maps and charts.
- Expand an analysis by enriching a dataset with Esri demographics, adding layers from ArcGIS Living Atlas of the World, creating tables, time series graphs, data clocks, a link analysis, and more.
- Enhance and streamline an analysis by enabling the Insights scripting environment and using a Python script to create charts, scatter plots, and histograms.
- Share your Insights project work with stakeholders, and create step-by-step analysis models that enable others to repeat or adapt the workflows you used.

“Very thorough materials that were **easy to follow.**”

—Kimberly Johnson, Location Analytics Using ArcGIS Insights



### Spatial Analysis with ArcGIS Pro

Three days (24 hours)

**Prerequisite:** ArcGIS Pro: Essential Workflows or Migrating from ArcMap to ArcGIS Pro

#### Overview

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™.

#### Who Should Attend

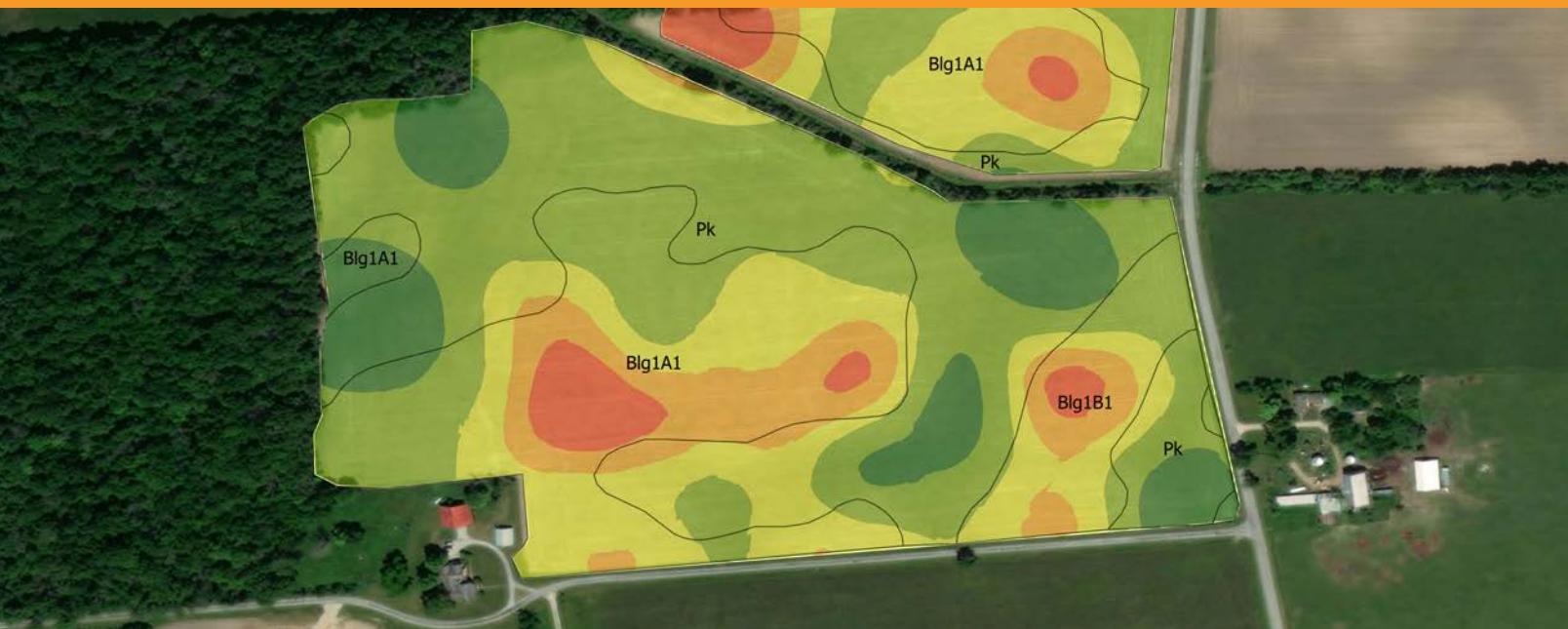
GIS analysts, specialists, and others who manage or conduct spatial analysis projects

#### Learn How To

- Prepare data and choose appropriate tools and settings for an analysis.
- Examine features and distribution patterns within an area of interest and identify optimal locations using 2D and 3D analysis tools.
- Quantify spatial patterns using spatial statistics and analyze change over time to identify emerging hot spots.
- Use interpolation and regression analysis to explain why patterns occur and predict how patterns will change.

“The course covered a lot of very common areas within GIS, many of which I have had a hard time learning about in the past. It made a lot of **difficult topics easy to understand.**”

—Andrew Weis, Spatial Analysis with ArcGIS Pro



## Imagery Analysis in ArcGIS Pro

Two days (16 hours)

**Prerequisite:** ArcGIS Pro: Essential Workflows or Migrating from ArcMap to ArcGIS Pro

### Overview

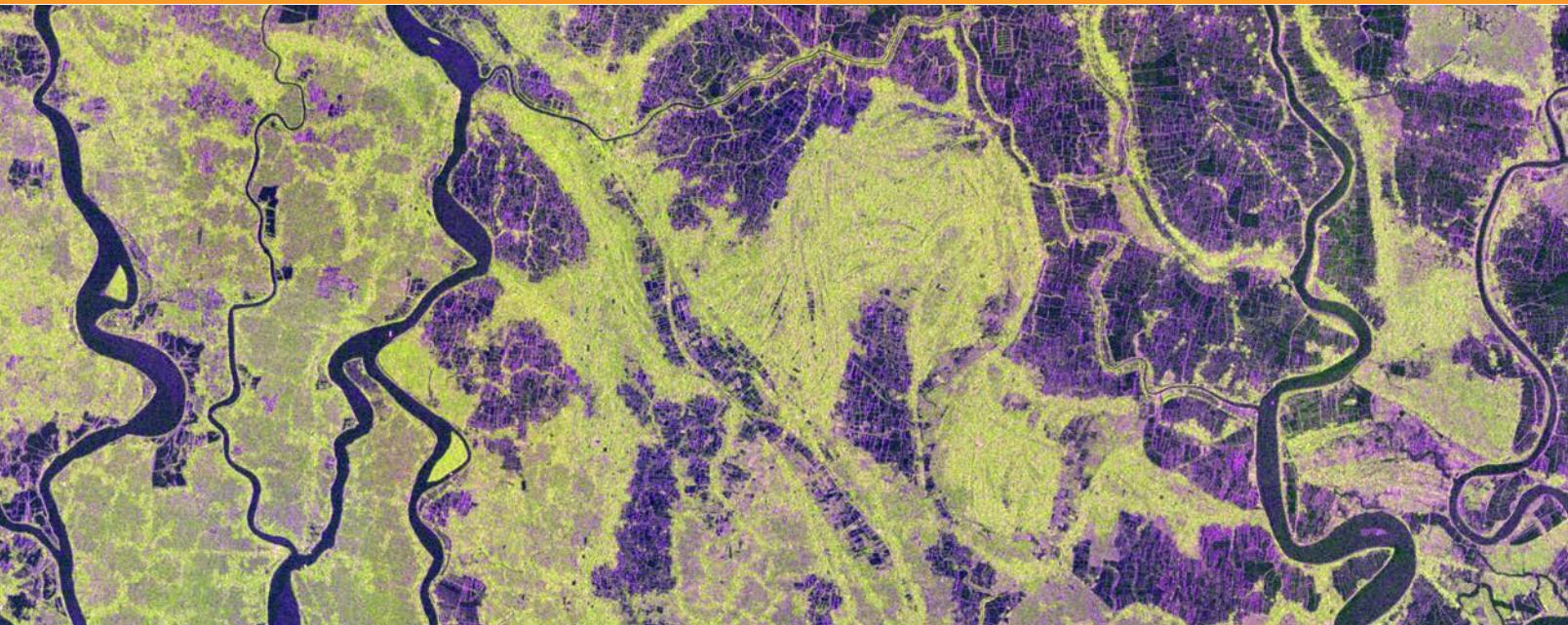
This course teaches how to extract meaningful information from satellite imagery, unpiloted aerial vehicle (UAV)-collected data, and other imagery formats. Workflows and considerations to display, process, and create derived raster products using ArcGIS Pro and ArcGIS Image Analyst are covered. You'll explore common imagery applications, including disaster recovery, damage assessment, and forest canopy assessment, and gain experience with the deep learning workflow.

### Who Should Attend

GIS professionals and imagery analysts in the private sector and civilian government agencies. Individuals in the defense and intelligence communities should take Image Analysis for Defense and Intelligence (see page 37).

### Learn How To

- Apply dynamic raster functions to enhance imagery display and perform change detection.
- Perform image classification and assess the accuracy of results.
- Postprocess classified thematic rasters to support analysis needs.
- Work with derived information products including digital elevation models.



## Working with Lidar Data in ArcGIS

One day (8 hours)

**Prerequisite:** ArcGIS Pro: Essential Workflows or  
Migrating from ArcMap to ArcGIS Pro

### Overview

This course introduces light detection and ranging (lidar) data concepts, collection methods, quality-control considerations, and common applications. Techniques to manage, edit, visualize, and share lidar-derived 2D and 3D information products using ArcGIS Pro are covered.

### Who Should Attend

GIS managers, data managers, analysts, specialists, and others who need to manage, create, analyze, and disseminate lidar data and lidar-derived information products

### Learn How To

- Validate the quality and accuracy of lidar data.
- Edit lidar data to correct errors.
- Organize, process, visualize, and share lidar data using ArcGIS LAS datasets, mosaic datasets, and point cloud scene layers.
- Derive useful information products from lidar data, including raster surfaces, building footprints, and vegetation estimates.

*“Everything was great. I really like how the instructor can jump into the [virtual machine] and see what students are doing and help **troubleshoot seamlessly**.”*

—Kelly Heatherman, Working with Lidar Data in ArcGIS



## Preparing Data for GIS Applications

Two days (16 hours)

**Prerequisite:** ArcGIS Pro: Essential Workflows or  
Migrating from ArcMap to ArcGIS Pro

### Overview

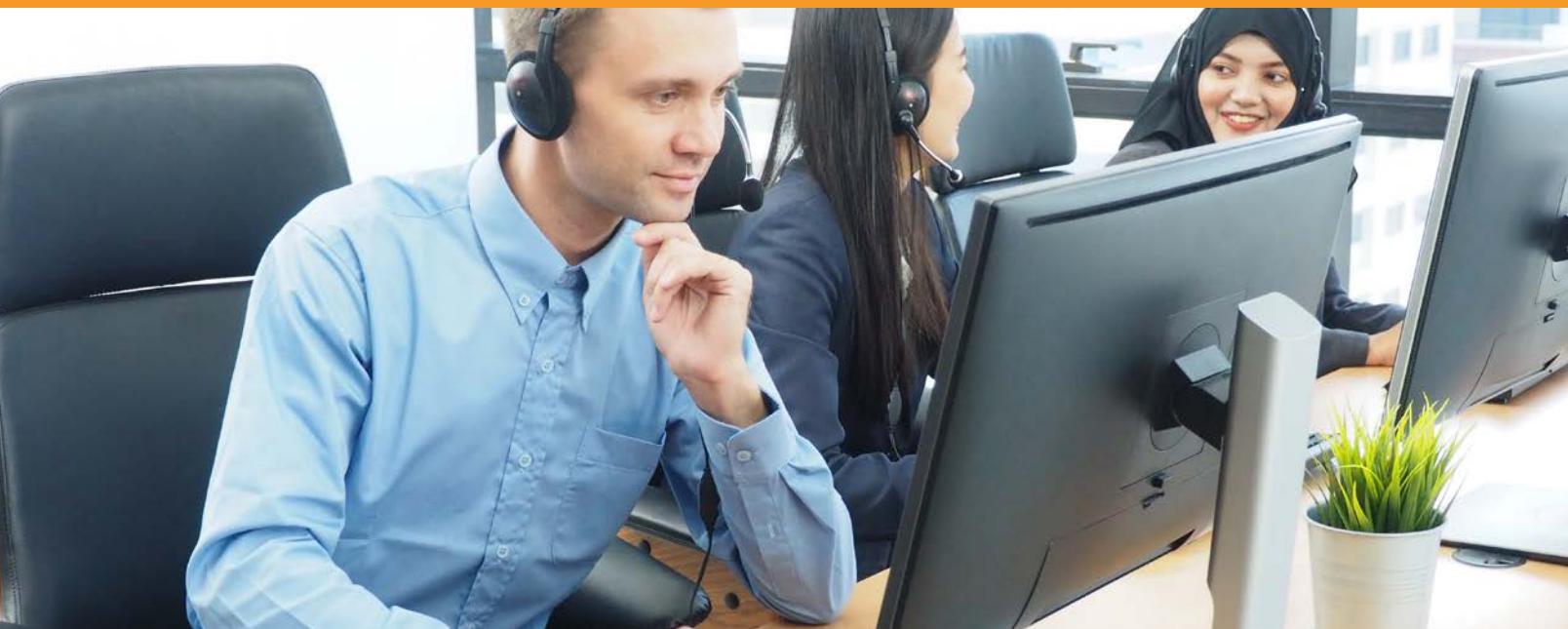
When starting a GIS mapping or analysis project, a common challenge is assembling the data needed to answer the question or produce the desired output. The datasets you need may be available but at different accuracy levels, or include the required geographic features but lack a key attribute. Many issues may make data unusable as is. This course explores data-preparation techniques that are relevant for a variety of GIS use cases. Gain essential skills to assess data quality using descriptive statistics, address inconsistencies, and deliver valid results from your GIS projects.

### Who Should Attend

GIS professionals and other individuals who need to create and share accurate data, maps, and analysis results using ArcGIS Pro

### Learn How To

- Identify data requirements for a given project and authoritative sources for data acquisition.
- Assess a dataset's spatial, temporal, and thematic accuracy; logical consistency; and completeness to determine whether it meets a project's data quality standards.
- Apply ArcGIS Pro tools and techniques to address quality issues, correct errors, and create new data that contains the spatial extent, accuracy, and attributes required for a project.
- Create metadata to document a dataset's quality so that others can easily assess its appropriateness for their projects.



### Managing Geospatial Data in ArcGIS

Two days (16 hours)

**Prerequisite:** ArcGIS Pro: Essential Workflows or Migrating from ArcMap to ArcGIS Pro

#### Overview

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.

#### Who Should Attend

GIS managers, analysts, data managers, data technicians, and others who manage geographic data

#### Learn How To

- Create a geodatabase, explore schema options, and evaluate appropriate data models.
- Add data to a geodatabase, edit feature geometry and attributes, and create a mosaic dataset to store and disseminate imagery.
- Define data rules and relationships to simplify data editing and ensure data integrity.
- Configure access to an enterprise geodatabase and create a versioned feature class to allow multiple concurrent editors.

“The training was very **in-depth** and helped me **learn a lot** about [ArcGIS Pro], which I was not very familiar with.”

—Eliott Rutzky, Managing Geospatial Data in ArcGIS

“The instructor made **learning** and soaking up the course **material easy** for all class attendees.”

—Michael Lawanas, Managing Geospatial Data in ArcGIS



### Creating and Editing Data with ArcGIS Pro

Two days (16 hours)

**Prerequisite:** ArcGIS Pro: Essential Workflows or Migrating from ArcMap to ArcGIS Pro

#### Overview

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.

#### Who Should Attend

GIS technicians, specialists, and other experienced ArcGIS users who create and maintain their organization's geographic data

#### Learn How To

- Apply a standard editing workflow to manage updates to geographic data.
- Configure ArcGIS Pro application and project settings to support efficient editing.
- Create, modify, and delete 2D and 3D features and attributes.
- Solve common data alignment issues and maintain spatial relationships among features when editing.

“I really like the examples and exercises. The book is **well written** and will be a **useful resource** in the future.”

—Rich Galtieri, Creating and Editing Data with ArcGIS Pro

“I enjoy that course materials and the exercises give you a little glimpse into different areas of the world while maintaining the **goal of introducing** topics and encouraging the practice of tools/skills within ArcGIS Pro.”

—Marguerite Hoover, Creating and Editing Data with ArcGIS Pro



### Working with Parcel Data in ArcGIS Pro

Three days (24 hours)

Prerequisite: Creating and Editing Data with ArcGIS Pro

#### Overview

This course teaches how to maintain accurate, up-to-date, and authoritative parcel data using ArcGIS Parcel Fabric. You will learn a standard workflow to create a parcel fabric in a file geodatabase, add parcel data to the fabric, and edit parcels to reflect real-world changes. This course assumes familiarity with land records terminology.

#### Who Should Attend

GIS technicians, editors, and others who need to create and edit parcel data

#### Learn How To

- Configure a local deployment of Parcel Fabric.
- Update parcels to reflect legal record changes or improved data quality and track parcel lineage over time.
- Publish a parcel fabric as a feature service to ArcGIS Enterprise so that up-to-date parcel data is available to everyone in your organization who needs it.
- Edit parcel geometry and attributes in a branch-versioned environment.

“It was all great and very informative. I believe I am now much better prepared for the **upcoming migration** to ArcGIS Pro.”

—Allen Adair, Working with Parcel Data in ArcGIS Pro

“Great class. I feel much more confident about the [ArcGIS Pro] parcel fabric and can’t wait to **apply** what I’ve learned.”

—Thomas Konzel, Working with Parcel Data in ArcGIS Pro



### Deploying and Maintaining a Multiuser Geodatabase

Two days (16 hours)

**Prerequisite:** ArcGIS Pro: Essential Workflows or Migrating from ArcMap to ArcGIS Pro and experience managing a relational database management system

#### Overview

This course prepares you to create a multiuser geodatabase that stores and manages your organization's authoritative geographic data. Learn about the multiuser geodatabase architecture and apply techniques to efficiently load data, assign user privileges, and maintain performance over time. During course exercises, you may work with the relational database management system (RDBMS) product that is relevant for your organization (Microsoft SQL Server or PostgreSQL).

#### Who Should Attend

Spatial database administrators and GIS data managers

#### Learn How To

- Create a multiuser geodatabase.
- Load and update data in a multiuser geodatabase.
- Configure user roles and permissions to provide secure data access.
- Apply best practices to optimize geodatabase performance.

### Implementing Versioned Workflows in a Multiuser Geodatabase

Three days (24 hours)

**Prerequisite:** Completion of ArcGIS Pro: Essential Workflows and Deploying and Maintaining a Multiuser Geodatabase

#### Overview

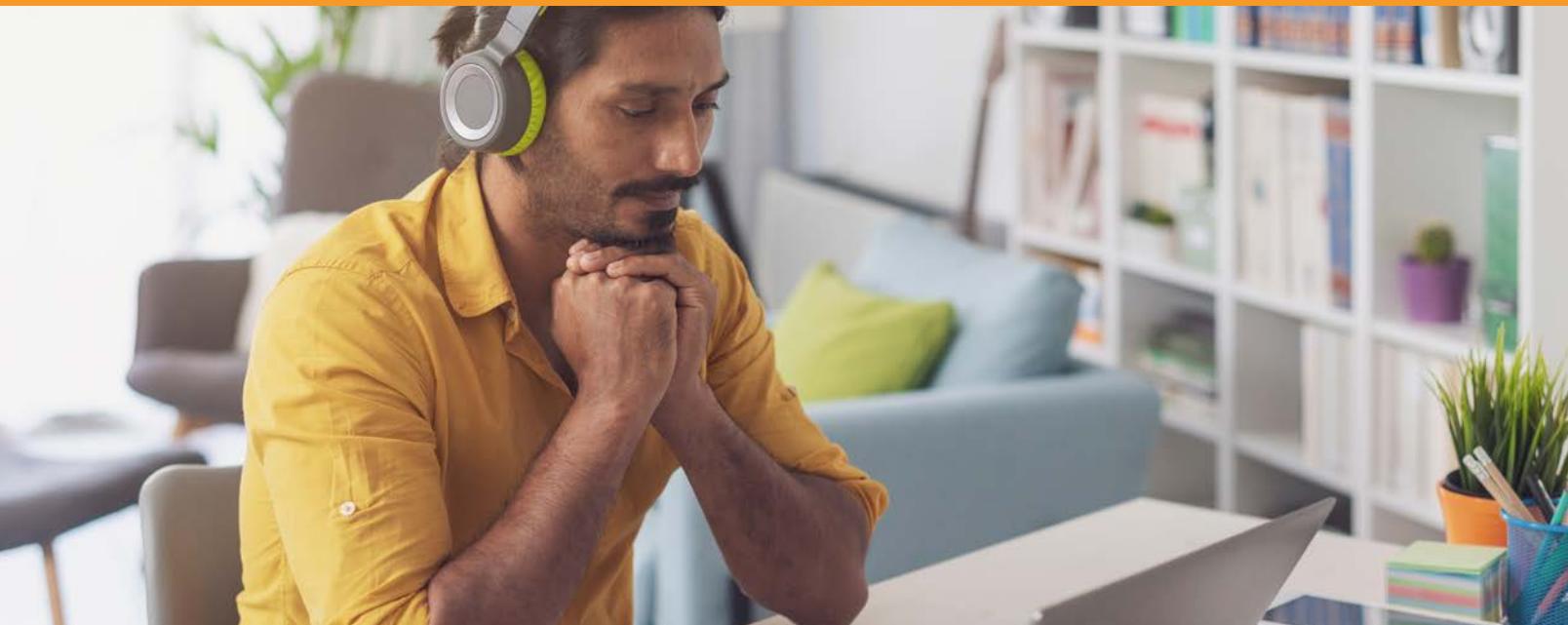
Learn a sound traditional versioning workflow that minimizes disruption to editors, ensures the integrity of your organization's GIS data, and integrates well with existing business workflows. This course explores a variety of versioned editing workflows for the enterprise geodatabase, including traditional versioned editing, nonversioned editing, and geodatabase replication. For training on branch versioning workflows, see Configuring Branch Versioning in ArcGIS.

#### Who Should Attend

Geodatabase administrators and GIS data managers

#### Learn How To

- Design a traditional versioning workflow that meets your organization's needs.
- Manage multiple geodatabase versions.
- Create and maintain one-way, two-way, and checkout replicas.
- Monitor and maintain geodatabase performance in a traditional versioned editing environment.



### Configuring Branch Versioning in ArcGIS

One day (8 hours)

**Prerequisite:** Completion of ArcGIS Pro: Essential Workflows or Migrating from ArcMap to ArcGIS Pro and completion of ArcGIS Enterprise: Configuring a Base Deployment or equivalent knowledge.

#### Overview

This course prepares GIS professionals and database administrators to implement branch versioning in an enterprise geodatabase using ArcGIS Pro. Learn best practices to establish branch versioning workflows that support multiuser editing and the accuracy of your authoritative geospatial data. This course is especially relevant for organizations that have deployed ArcGIS Utility Network or ArcGIS Parcel Fabric. For training on traditional versioning workflows, see Implementing Versioned Workflows in a Multiuser Geodatabase.

#### Who Should Attend

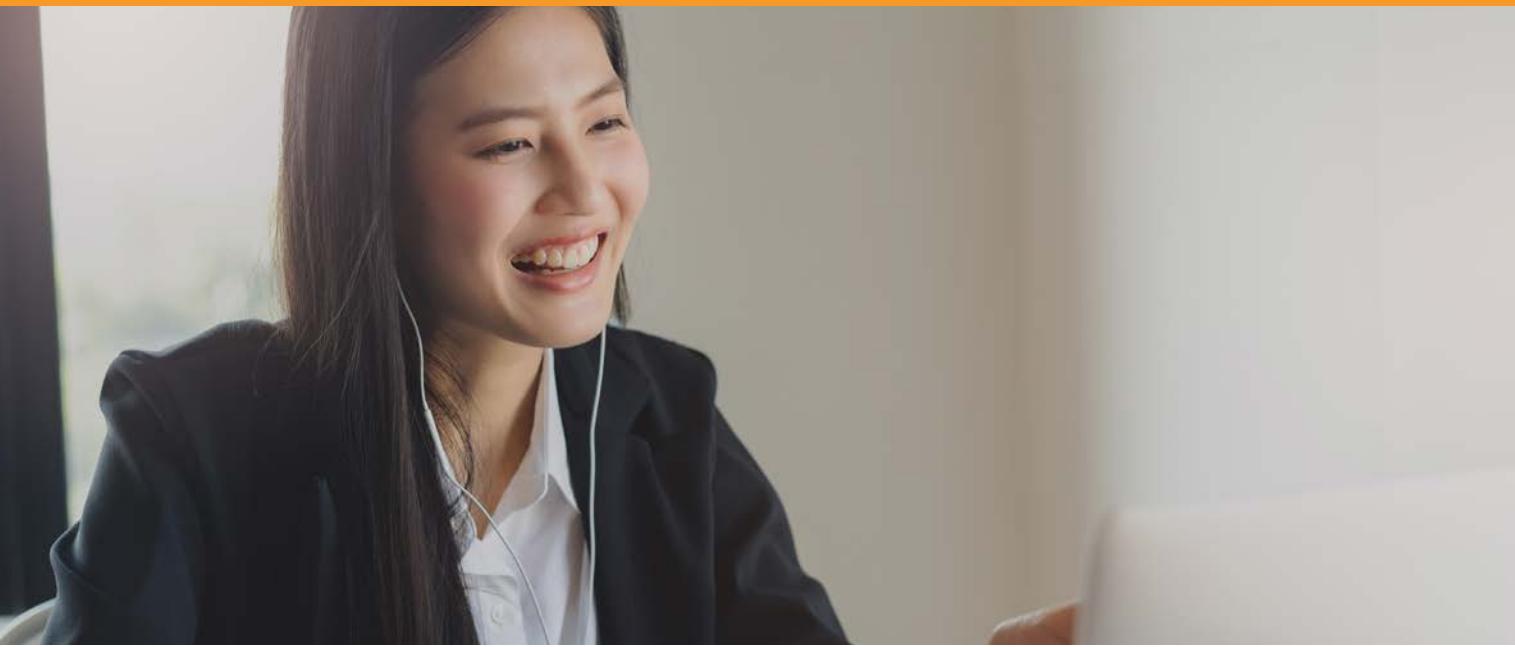
GIS database managers and administrators

“Good, concise examples of different uses in the **branch versioning environment**. This course will help get me and my team up and running with branch versioning today!”

—Joel Griffin, Configuring Branch Versioning in ArcGIS

#### Learn How To

- Create and edit a branch version of a feature class stored in an enterprise geodatabase.
- Configure user roles, group permissions, and privileges for branch-versioned editing.
- Share branch-versioned data as a service to support online and offline multiuser editing workflows.
- Implement conflict detection, track feature edits, and synchronize offline edits to branch-versioned data.



### Working with ArcGIS Dashboards

Two days (16 hours)

**Prerequisite:** Basic familiarity with ArcGIS Online is recommended.

#### Overview

Learn how to present data simply and effectively to monitor key metrics and activities in progress and provide decision-makers with easy access to the data that matters most to them. This course covers the essential concepts and workflows you need to understand to create an ArcGIS Dashboards dashboard from scratch, configure it to meet your data users' needs, and share it with stakeholders.

#### Who Should Attend

Anyone who wants to present a lot of data simply and effectively using visually engaging dashboards

#### Learn How To

- Efficiently create a dashboard and design its layout.
- Display dynamic data, attribute data, maps, and charts on a dashboard.
- Configure dashboard interactivity.
- Use Arcade expressions to create data sources for visualizations and format dashboard elements.



### Field Data Collection and Management Using ArcGIS

Two days (16 hours)

Prerequisite: ArcGIS Online: Essential Workflows

#### Overview

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.

#### Who Should Attend

GIS and field operations managers and other GIS professionals

#### Learn How To

- Create and configure web maps for map-based data collection and surveys for form-based data collection.
- Quickly capture real-time field observations.
- Monitor fieldwork in progress using a dashboard.

“I was very impressed with the software and [online] class operation. It was the **closest thing** you can have to being in an actual classroom. Well done.”

—David McCoy, Field Data Collection and Management Using ArcGIS



## Building Web Apps with ArcGIS Experience Builder

Two days (16 hours)

**Prerequisite:** Basic familiarity with ArcGIS Online is recommended

### Overview

Learn how to build immersive web apps that take advantage of modern web design principles without writing code. This course shows how to interactively create, configure, and publish mapcentric and datacentric web apps that feature your organization's content.

### Who Should Attend

GIS professionals, web designers, and others who want to create ArcGIS Experience Builder applications

### Learn How To

- Design the app layout and theme based on the audience and purpose.
- Configure widgets to enable users to interact with your organization's web maps and 2D and 3D data.
- Configure widgets to provide data-driven functionality across multiple pages.
- Test, preview, and publish your apps for use on a variety of devices.

## Creating Python Scripts for ArcGIS

Three days (24 hours)

**Prerequisite:** ArcGIS Pro: Essential Workflows or Migrating from ArcMap to ArcGIS Pro

### Overview

Your time is valuable. Learn how to create scripts that will streamline your GIS work. This course teaches how to access the Python environment in ArcGIS Pro, script common data management tasks, and automate geoprocessing workflows. You'll learn techniques to share your scripts so they are easily accessible both inside and outside ArcGIS Pro.

### Who Should Attend

GIS analysts, specialists, data processors, and others who want to automate ArcGIS tasks and workflows

### Learn How To

- Apply Python syntax rules to create robust scripts in ArcGIS Pro.
- Use automation techniques to repeat geoprocessing tasks in a Python script to create an efficient, repeatable analysis workflow.
- Use Python to access geospatial data, edit attributes, and create and modify features.
- Create custom Python script tools that can be shared with other ArcGIS users.



### Get Started with ArcGIS Arcade

Two days (16 hours)

**Prerequisite:** ArcGIS Pro: Essential Workflows or Migrating from ArcMap to ArcGIS Pro, and ArcGIS Online: Essential Workflows

#### Overview

Discover the unique role of the Arcade expression language within ArcGIS and explore concepts that underlie writing and executing Arcade expressions that can be used across the ArcGIS system (ArcGIS Online, ArcGIS Pro, ArcGIS Enterprise, and ArcGIS apps). In course exercises, you will get familiar with Arcade scripting environments and build expressions to customize map labels and pop-ups, create field calculations, enable data validation, and more. You'll leave class with a strong understanding of Arcade capabilities and community resources.

#### Who Should Attend

GIS professionals and others who want to learn about the benefits of Arcade scripting and how to write, apply, and share Arcade expression

#### Learn How To

- Understand Arcade language features, profiles, and portability across the ArcGIS system.
- Apply a standard workflow to plan, write, and execute Arcade expressions.
- Use Arcade expressions within ArcGIS Dashboards.
- Identify, troubleshoot, and fix common scripting errors.



## Working with Utility Networks in ArcGIS

Two days (16 hours)

Prerequisite: ArcGIS Pro: Essential Workflows or Migrating from ArcMap to ArcGIS Pro

### Overview

ArcGIS Utility Network provides robust tools to model, visualize, edit, and analyze complex utility networks. This course introduces the utility network model in the enterprise geodatabase. Learn about capabilities that organizations can leverage to better manage network assets, minimize network disruptions, and quickly respond to outages. Attendees can choose to complete course exercises using water, gas, or electric utility data.

### Who Should Attend

GIS professionals who edit and analyze electric, gas, water, or telecommunications networks

### Learn How To

- Explore a utility network that uses an industry-specific configuration from ArcGIS Solutions.
- Apply a standard workflow to create and edit network features and components while maintaining data integrity.
- Perform network tracing to identify the source of a disruption and the impacted customers.
- Create and share a diagram to dynamically visualize the network.

“As always, course material is **extremely well done**. Great exercises and easy to follow along!”

—Kent Cooper, Working with Utility Networks in ArcGIS



### Configuring Utility Networks in ArcGIS

Two days (16 hours)

Prerequisite: Working with Utility Networks in ArcGIS

#### Overview

This course prepares GIS administrators, technical leads, and others to deploy ArcGIS Utility Network to realistically model and manage their organization's assets and infrastructure. Learn how to define the network schema and properties and load data into a utility network. Attendees can complete course exercises using electric, gas, or water utility scenarios.

#### Who Should Attend

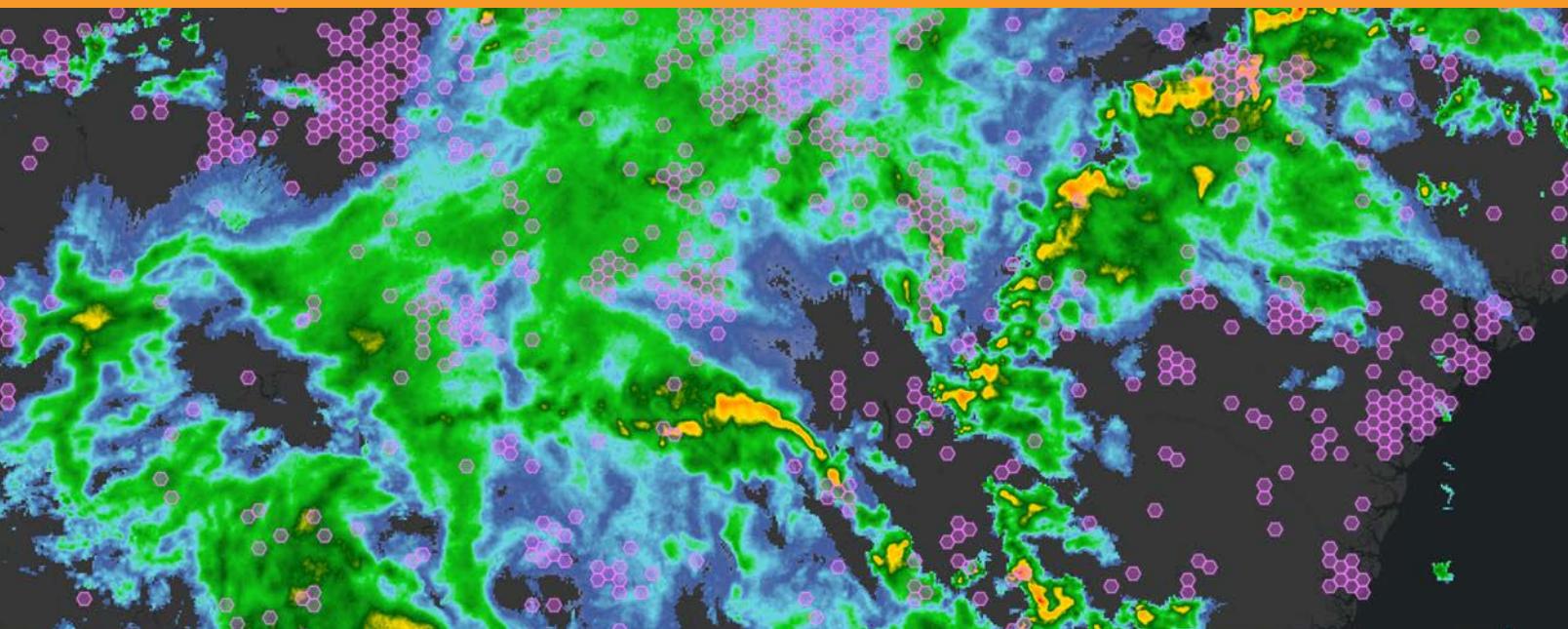
GIS administrators, technical leads, and others who need to configure and deploy ArcGIS Utility Network

#### Learn How To

- Build a utility network using geoprocessing tools.
- Choose a method to migrate existing features into a utility network.
- Configure customizations to enhance network diagrams and tracing and editing workflows.
- Manage utility network schema changes and release updates over time.

“I really like, no LOVE, that the industries are broken out and I did not have to learn this while using water or electric data! It is so much clearer when you use **data and industry terminology** that you know already.”

—Becky Shumate, Configuring Utility Networks in ArcGIS



### Introduction to Geospatial Concepts for Intelligence

Two days (16 hours)

**Prerequisite:** Experience working on a desktop personal computer and with Microsoft Office applications and a basic familiarity with ArcGIS Pro

#### Overview

Learn foundational geospatial concepts that support the intelligence cycle. In the context of real-world scenarios, you will get hands-on practice applying ArcGIS Pro tools and workflows to prepare, visualize, analyze, and disseminate data that supports intelligence operations.

#### Who Should Attend

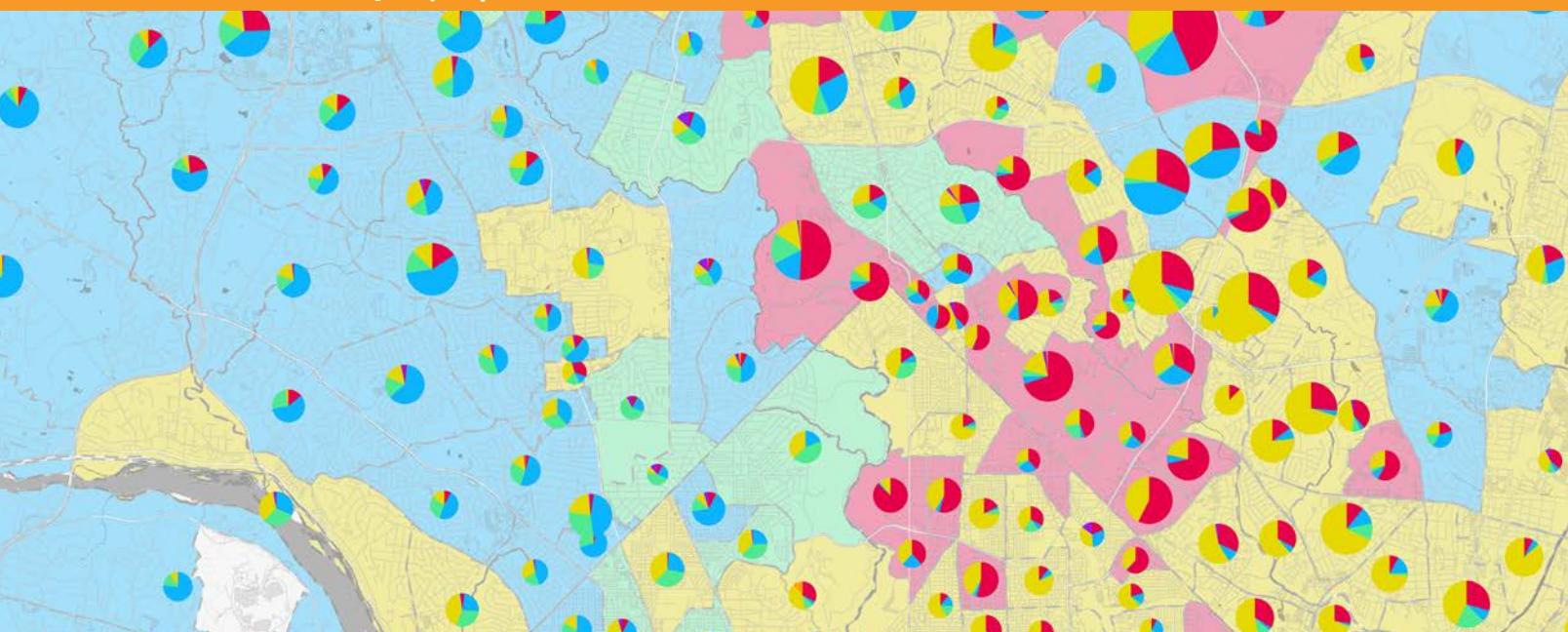
Professionals in the military, intelligence, and national security communities who have minimal or no geospatial experience

#### Learn How To

- Identify and prepare geospatial data and other content for visualization and analysis.
- Organize, create, and manage geospatial data stored in a geodatabase.
- Display geospatial data and imagery on a map.
- Create and disseminate information products to support mission planning and intelligence operations.

“Good introduction to ArcGIS Pro. I was pleased with the **detail of the example scenarios**, it definitely aided in understanding the benefit of ArcGIS Pro.”

—Jaren Johnson, Introduction to Geospatial Concepts for Intelligence



### Using ArcGIS for Geospatial Intelligence Analysis

Two days (16 hours)

Prerequisite: Introduction to Geospatial Concepts for Intelligence

#### Overview

This course teaches geospatial concepts and recommended workflows that support the production of timely, accurate, and actionable intelligence. Using relevant scenarios and operational problems, you will learn how to manage, analyze, and visualize geospatial data, then share your work by producing mission-specific products aligned with industry best practices.

#### Who Should Attend

Professionals in the military, intelligence, and national security communities who specialize in intelligence planning, geospatial intelligence, all-source intelligence, imagery exploitation, or intelligence production

#### Learn How To

- Evaluate and prepare geospatial data to support intelligence planning and analysis activities.
- Analyze potential threats to identify patterns, hot spots, and clusters.
- Apply ArcGIS Pro geoprocessing tools and ArcGIS LocateXT to support production workflows, analysis, visualization, and information dissemination.
- Create and share operational map products that include military symbology.

“The course material not only gave me a chance to practice and apply my learning, but it also gave plenty of **relevant examples** to **contextualize my learning**.”

—Nathan Hardie, Using ArcGIS for Geospatial Intelligence Analysis



### ArcGIS Enterprise: Analysis Workflows for Intelligence

Two days (16 hours)

**Prerequisite:** Completion of Introduction to Geospatial Concepts for Intelligence or Using ArcGIS for Public Safety Workflows or equivalent knowledge is required. Completion of Using ArcGIS for Geospatial Intelligence Analysis or ArcGIS Analysis Workflows for Public Safety is recommended but not required.

#### Overview

This course introduces mapping and analysis capabilities available through your organization's ArcGIS Enterprise portal. Learn workflows to leverage ArcGIS Enterprise capabilities and apps to make web maps, analyze data, and create useful information products to share with decision-makers.

#### Who Should Attend

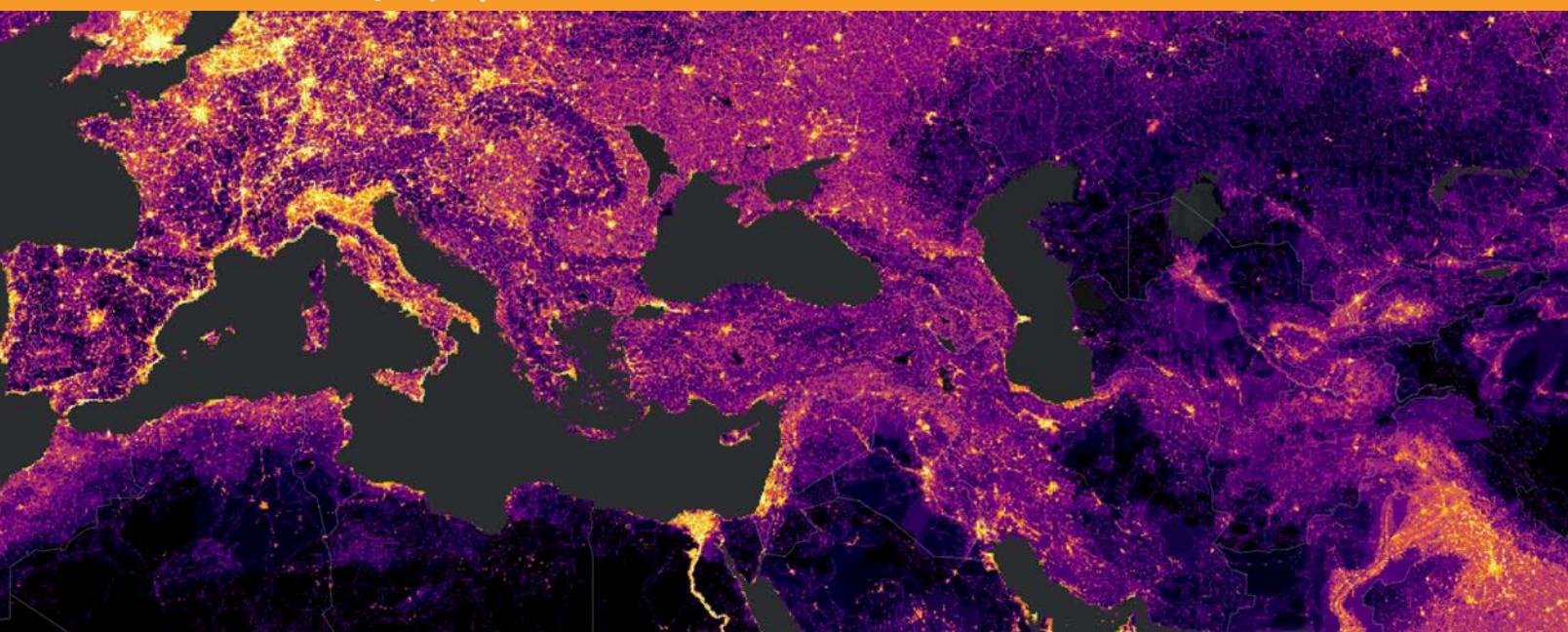
Analysts in the defense, intelligence, and public safety communities

#### Learn How To

- Understand the types of content that can be shared to an ArcGIS Enterprise portal and how to find content that supports your needs.
- Create a web map, add layers to it, and analyze data.
- Configure a web app to share analysis results.
- Create dashboards, immersive digital stories, and rich web experiences to support real-time monitoring of operations and decision-making.

“Great course materials; the workbook and instructor did a great job of introducing the ArcGIS software to me, as well as [they] showed the **great possibilities ArcGIS** can provide for the intel community.”

—Andrew Truman, ArcGIS Enterprise: Analysis Workflows for Intelligence



### Image Analysis for Defense and Intelligence

Two days (16 hours)

Prerequisite: Introduction to Geospatial Concepts for Intelligence

#### Overview

This course prepares geospatial intelligence and imagery professionals to work with a variety of imagery data in the context of realistic scenarios. Gain hands-on practice with ArcGIS Pro imagery tools and learn techniques and recommended workflows to create useful information that supports mission planning and tactical operations.

#### Who Should Attend

Geospatial and imagery analysts in the military, intelligence, and national security communities

#### Learn How To

- Choose appropriate imagery datasets for a given scenario and area of interest.
- Understand factors that can impact the accuracy of imagery interpretation and apply mensuration techniques to accurately measure features on oblique and vertical imagery.
- Apply raster processing functions to enhance imagery display and perform change detection analysis.
- Perform image classification and analyze motion imagery to categorize land-cover features and identify areas and objects of interest.

“Four years on ArcGIS Pro and I still learned many **tools to utilize** in the future production of products in my work.”

—Garrett J. Pfaff, Image Analysis for Defense and Intelligence



### Using ArcGIS for Public Safety Workflows

Two days (16 hours)

Prerequisite: Introduction to GIS Using ArcGIS

#### Overview

This course introduces ArcGIS Pro 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 and 3D scenes to effectively disseminate that information. Course exercises use realistic public safety scenarios.

#### Who Should Attend

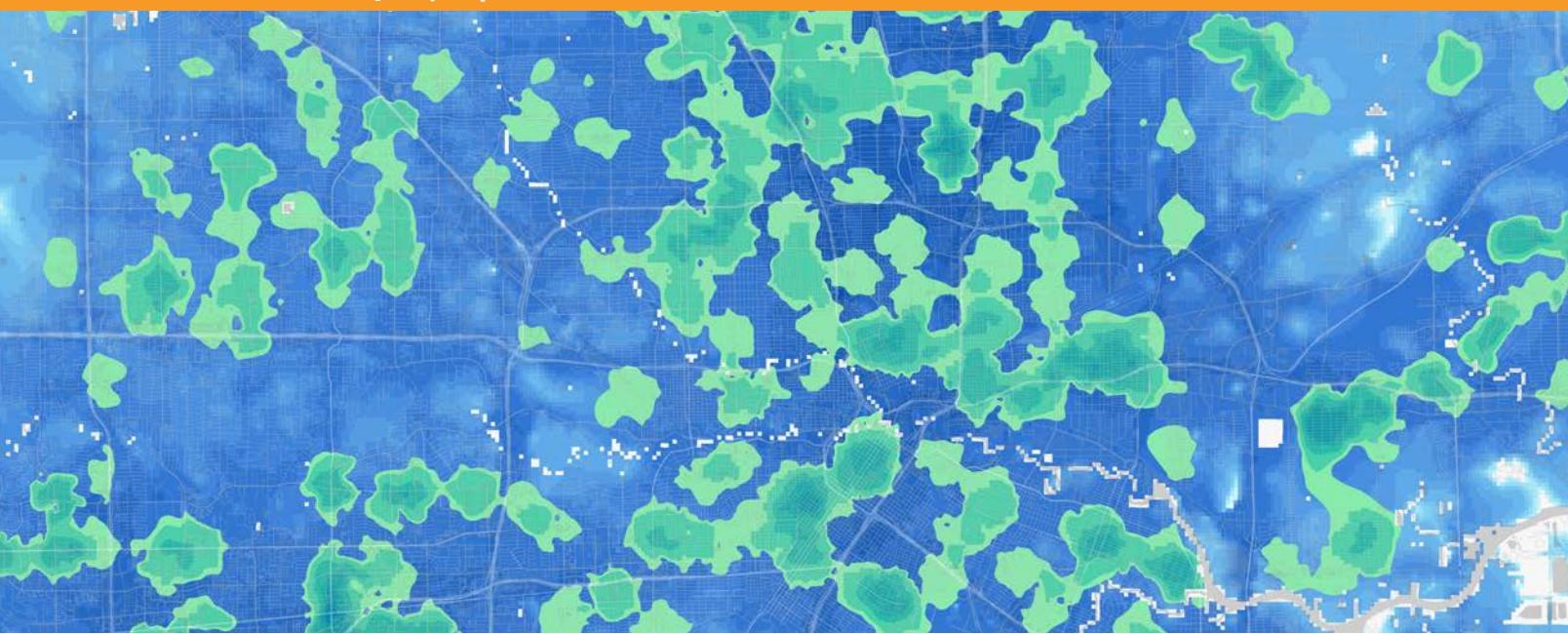
Emergency management, law enforcement, fire and rescue, and emergency call taking and dispatch professionals who have minimal experience with GIS

#### Learn How To

- Display data stored in tables and spreadsheets as features on a map.
- Visualize trends and patterns in your data.
- Apply spatial analysis techniques to derive new information from your data.
- Edit GIS data to ensure responders, decision makers, and stakeholders have access to up-to-date data

“Having the **different scenarios** for each exercise gave the class different ideas of how we can use ArcGIS Pro in our everyday environment.”

—Katie Yeloushan, Using ArcGIS for Public Safety Workflows



### ArcGIS Analysis Workflows for Public Safety

Two days (16 hours)

Prerequisite: Using ArcGIS for Public Safety Workflows

#### Overview

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. You'll also learn methods to automate analysis workflows so they can be easily repeated and shared with colleagues.

#### Who Should Attend

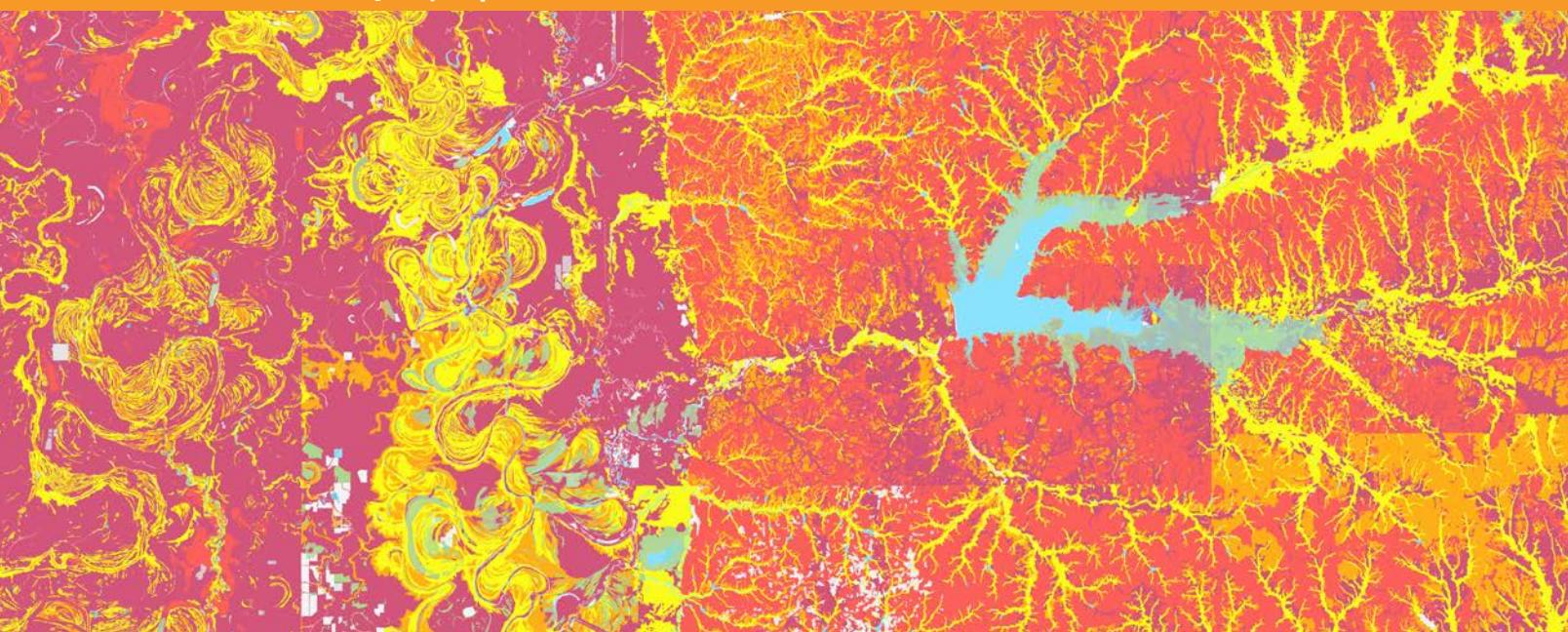
Crime analysts and other public safety professionals in law enforcement, homeland security, emergency management, and related fields

#### Learn How To

- Evaluate and prepare data from a variety of sources to support an analysis project.
- Work with spatial statistics tools to identify patterns, hot spots, and clusters.
- Apply analytical techniques to predict behavior and impact of public safety phenomena.
- Automate analysis workflows using tasks and models.

*"The course materials were very on point and drove home all the concepts being presented."*

—David Garcia, ArcGIS Analysis Workflows for Public Safety



### Arc Hydro: GIS for Water Resources

Three days (24 hours)

**Prerequisite:** A general GIS or water resources background is required. Familiarity with ArcGIS Pro is recommended. This course is typically offered as a private training event.

#### Overview

Explore the Arc Hydro data model and tools using a series of real-world examples. You will learn the basic principles of the Arc Hydro data model, how to extend it, and about the Arc Hydro tools that help you efficiently manage and use the data model and perform water resource analyses.

#### Who Should Attend

GIS professionals and others interested in ArcGIS water resource applications who want to implement the Arc Hydro data model and tools

#### Learn How To

- Combine Arc Hydro data structure and tools to solve realistic water resource problems.
- Extend Arc Hydro tools to create custom functionality.
- Integrate external models into Arc Hydro.
- Perform watershed modeling and analyses.



### Hydrologic and Hydraulic Analyses Using ArcGIS

Two days (16 hours)

**Prerequisite:** : A general GIS or water resources background and Arc Hydro training or experience with H&H and GIS technology is required. Familiarity with ArcGIS Pro is required. This course is typically offered as a private training event.

#### Overview

Learn GIS techniques for terrain analysis, hydrologic and hydraulic (H&H) characteristics extraction, numerical model input and output, modeling process automation, and result mapping. The class will take full advantage of ArcMap and its extensions to support requirements that H&H analyses pose to GIS technology. You will gain hands-on experience developing HMS and RAS model inputs and analyzing and mapping model results. Utilization of GIS infrastructure for support of other H&H models will also be discussed. While H&H analyses are at the core of this class, the focus is on the functionality that GIS provides to H&H modeling, not on performing H&H analyses. Opportunities for using GIS for post-model analyses such as mapping and flood damage estimation will be discussed.

#### Who Should Attend

H&H and GIS professionals who support H&H analyses

#### Learn How To

- Implement GIS as a spatial and temporal integrator.
- Use hydrologic statistical modeling (NSS and StreamStats).
- Develop hydrologic and hydraulic physical models.
- Perform floodplain mapping.



### Introduction to ArcGIS Pipeline Referencing

Two days (16 hours)

**Prerequisite:** This course is typically offered as a private training event. See catalog webpage for details.

#### Overview

The ArcGIS Pipeline Referencing extension to ArcGIS provides advanced linear referencing capabilities to pipeline operators. Using real-world examples, this course teaches essential concepts and workflows to map and visualize pipeline data, define behavior for events and route associations, and maintain accurate pipeline data over time. Familiarity with linear referencing concepts is assumed.

#### Who Should Attend

GIS professionals in the pipeline industry

#### Learn How To

- Apply best practices to streamline your organization's pipeline data management workflows.
- Configure and manage linear referencing networks and events.
- Apply common pipeline workflows such as rerouting, retirement, splitting and merging centerlines, and event maintenance.

### Streamline Airport Operations with ArcGIS Aviation Airports

Two days (16 hours)

**Prerequisite:** ArcGIS Pro: Essential Workflows or Migrating from ArcMap to ArcGIS Pro. This course is typically offered as a private training event.

#### Overview

This course introduces ArcGIS Aviation Airports and its capabilities that help organizations meet regulatory requirements for safe airport operations. Explore the airports data model and learn how to leverage it to meet ICAO and FAA regulations.

#### Who Should Attend

GIS professionals who need to work with the airports data model

#### Learn How To

- Create, manage, analyze, and chart all information required to perform obstacle analysis.
- Implement the ArcGIS airports data model to support broader GIS initiatives at an airport.
- Use ArcGIS Aviation Airports to create and maintain airport signage and marking plans.



### Adoption Strategy Workshops

A common challenge when modernizing GIS infrastructure and deploying new ArcGIS capabilities is preparing the impacted workforce to quickly adopt new workflows. In these workshops for project stakeholders, teams, and leaders, an Esri adoption strategy consultant facilitates an interactive class experience, with the majority of time dedicated to discussion and activities. Workshops are especially effective when delivered as a private training event for teams working on shared initiatives.

### Preparing for Change

Two days (16 hours)

Participants will explore the foundational steps to deploy a successful adoption strategy using the popular Prosci ADKAR model of change management. Workshop materials include templates to jump-start change management efforts after class. Participants should identify a planned or in-progress project that will benefit from change management prior to class.

“Wonderful class. I am so appreciative that Esri offers this type of class in addition to more **software- and data-related courses**. This really helps to give any GIS analyst or manager a much **more holistic view** of how to communicate and implement advances to any GIS program successfully.”

—Kim Mauch, Preparing for Change

### Advancing Change Capability Series

Positively influencing organizational change and adoption of new technology requires strong interpersonal communication and collaboration skills. Each workshop below will help participants gain insight into personal behavioral style and versatility and equip them with strategies to be highly effective leaders, able to promote collaboration, communication, organizational agility, and geospatial resiliency.

#### **Communicating and Collaborating for ArcGIS Success**

One day (8 hours)

Having an accurate awareness of others and their behavioral preferences is fundamental to building productive relationships. This workshop explores the four core behavioral preferences. Participants will review a holistic assessment of their personal behavioral preferences and, through facilitated group discussion and activities, learn techniques to recognize the preferences of others and adapt quickly to foster trust, collaboration, and productivity.

#### **Building Organizational Agility and Enabling Change in a Geospatial World**

One day (8 hours)

Participants take The Adaptive Mindset for Agility® assessment, which measures underlying skills that are essential for organizational agility. This is a highly experiential workshop full of actionable techniques that participants can apply to generate and implement innovative ideas that foster ArcGIS adoption.

#### **Creating Organizational and Geospatial Resiliency**

One day (8 hours)

Participants use The Adaptive Mindset for Resiliency® multirater assessment to build resiliency and high performance in complex, and sophisticated environments. Participants will learn practical strategies to alter reactive responses to change and develop a resilience road map to foster faster adoption in future ArcGIS modernization efforts.

#### **Behavioral EQ for Geospatial Leadership Success**

One day (8 hours)

This workshop, beneficial to all people leaders, uses a holistic assessment for analyzing emotional intelligence (EQ). Participants learn essential elements of behavioral and emotional intelligence and how they can leverage EQ when leading teams, stakeholders, and entire organizations through change. Participants will also discover impactful strategies they can apply to improve individual and organizational performance.

## Esri Training Center Locations

### Charlotte, North Carolina

3325 Springbank Lane, Suite 200  
Charlotte, NC 28226-3343  
(704) 541-9810

### Sacramento, California

1600 K Street, 4th Floor, Suite 4C  
Sacramento, CA 95814-4022  
(909) 793-2853, Ext. 1906

### Chesterbrook, Pennsylvania

1325 Morris Drive, 2nd Floor, Suite 201  
Chesterbrook, PA 19087  
(610) 644-3374

### San Antonio, Texas

19026 Ridgewood Parkway, 3rd Floor, Suite 309  
San Antonio, TX 78259  
(210) 499-1044

### Coral Gables, Florida

55 Miracle Mile  
Coral Gables, FL 33134  
(305) 446-9786

### St. Louis, Missouri

710 N. Tucker Boulevard, Suite 600  
St. Louis, MO 63101  
636-949-6620

### Louisville, Colorado

167 South Taylor Avenue, #110  
Louisville, CO 80027  
(303) 449-7779

### St. Paul, Minnesota

880 Blue Gentian Road  
Saint Paul, MN 55121-1596  
(651) 454-0600

### Middleton, Massachusetts

35 Village Road, 5th Floor  
Middleton, MA 01949-1234  
(978) 777-4543

### Vienna, Virginia

8615 Westwood Center Drive  
Vienna, VA 22182-2218  
(703) 506-9515

### Olympia, Washington

111 Market Street NE, 2nd Floor, Suite 250  
Olympia, WA 98501  
(360) 754-4727

### Redlands, California

380 New York Street  
Redlands, CA 92373  
(909) 793-2853, Ext. 3247

