

# ArcGIS Foundation

## ArcGIS Online: Essential Workflows

Duration: 2 days

### Overview

Get started with maps and apps.

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.

### Goals

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

### Prerequisites

No experience with GIS or ArcGIS Online is required

## Introduction to GIS Using ArcGIS

Duration: 3 days

### Overview

Discover the power of spatial.

Learn fundamental concepts that underlie GIS technology and geographic data. In this course, you will gain experience using GIS maps to visualize and explore real-world features; analyze data to answer questions and create new information; and share maps, data, and other resources so they can be easily accessed throughout your organization.

### Goals

- Identify appropriate 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.
- Perform spatial analysis to obtain information about map features within an area of interest.

### Prerequisites

Experience with Windows-based software for basic file management and browsing.

## ArcGIS Pro: Essential Workflows

Duration: 5 days

### Overview

Prepare to be productive with ArcGIS Pro.

Extend your foundational GIS knowledge, get comfortable with the ArcGIS Pro application, 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 will give you the experience needed to efficiently work with ArcGIS Pro.

### Goals

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

### Prerequisites

Completion of [Introduction to GIS Using ArcGIS](#) or equivalent knowledge.

## Putting ArcGIS across your organization

Duration: 3 days

### Overview

Get a comprehensive introduction to The ArcGIS platform components and capabilities. In this course, you explore ArcGIS apps used for mapping and visualization, data collection and management, spatial analytics, 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.

### Goals

- Map and analyze business data using ArcGIS apps and tools.
- Create and share data, web maps, and web apps using an ArcGIS portal.
- Streamline field data collection workflows.
- Configure web apps and dashboards to monitor field operations in real time.

### Prerequisite

Experience working with Microsoft Excel tables and other Windows-based software for file management and web browsing.

## Migrating from ArcMap to ArcGIS Pro

Duration: 3 days

### Overview

Meet the desktop app that makes GIS work more fun.

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.

### Goals

- 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.

### Prerequisites

This course assumes significant ArcMap experience. If you have no previous ArcMap experience, take [ArcGIS Pro: Essential Workflows](#) instead of this course.

## Collaboration and Sharing GIS

### Sharing Content to ArcGIS Enterprise

Duration: 3 days

### Overview

Bring your enterprise GIS portal to life.

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.

### Goals

- 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.

### Prerequisites

Completion of [ArcGIS Pro: Essential Workflows](#) or [Migrating from ArcMap to ArcGIS Pro](#) or equivalent knowledge.

## Data Collection and Management

### Get Started with ArcGIS Dashboards

Duration: 1 day

#### Overview

Enable at-a-glance insight.

This course is for anyone who wants to present a lot of data simply and effectively using visually engaging dashboards. Learn how to display multiple data visualizations on a single screen that supports dynamic data exploration, real-time operations monitoring, and informed decision-making. The course covers dashboard types, design considerations, layout options, and techniques to organize and focus dashboard elements to meet the specific information needs of your audience.

#### Goals

- Add data from multiple sources to a dashboard.
- Configure dashboard elements, including maps, charts, indicators, and lists.
- Manage data display and maximize the visual impact of your dashboards.

#### Prerequisites

Familiarity with ArcGIS Online will be helpful. For those new to ArcGIS Online, completing the [ArcGIS Online Basics](#) web course is recommended but not required.

### Creating and Editing Data with ArcGIS Pro

Duration: 3 days

#### Overview

Maintain the accuracy of your authoritative GIS data.

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.

#### Goals

- 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.

#### Prerequisites

Completion of [ArcGIS Pro: Essential Workflows](#) or equivalent knowledge.

## Field data collection and management

Duration: 3 days

### **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.

### **Collector for ArcGIS**

Now anyone in your organization can easily capture and update data in the field, right from their smartphone or tablet. Using the Collector for ArcGIS app, included with ArcGIS organizational accounts, your organization can maintain accurate and up-to-date GIS data while increasing the productivity of its mobile workforce.

### **Operations Dashboard for ArcGIS**

Monitor activities and events, track your field workforce, and assess the status and performance of your daily operations. Create focused executive dashboards that integrate maps, charts, and graphs.

### **Survey123**

Survey123 for ArcGIS is about you allowing your field crew to collect data efficiently in the field and using that information to make better decisions.

One can design surveys, collect data in the field, and migrate that data into ArcGIS Online and ArcGIS desktop

### **Workforce for ArcGIS**

Maximizing the efficiency of your field workforce is key to a successful mobile strategy. With the introduction of Workforce for ArcGIS now you can plan, monitor, and streamline field to office workflows using the ArcGIS platform.

### **Navigator for ArcGIS**

Navigator for ArcGIS is a mobile app that gets your field workforce where it needs to be, unlocking efficiency and improving reliability. Use the data provided or your own data to search and navigate directly to your organization's assets. Interact seamlessly with Collector for ArcGIS, Survey123 for ArcGIS, Workforce for ArcGIS, and other apps, and get reliable directions even when disconnected.

### **Goals**

- Create a web app to collect requests and generate work assignments
- Efficiently manage field workforce assignments and monitor field data collection in real time.
- Create and configure a web map for map-based data collection and surveys for form-based data collection.
- Create executive dashboards that integrate maps, lists, charts, and gauges for real-time operation views.

- Create a navigation map that includes custom asset data.

### **Prerequisite**

Putting ArcGIS to use across your organization.

## **Managing Geospatial Data in ArcGIS**

Duration: 3 days

### **Overview**

Achieve simplified data management that supports your organization's needs.

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.

### **Goals**

- 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.

### **Prerequisites**

Completion of [ArcGIS Pro: Essential Workflows](#) or [Migrating from ArcMap to ArcGIS Pro](#) or equivalent knowledge.

## **Working with Parcel Data in ArcGIS Pro**

### **Overview**

Modernize land records data management.

This course teaches how to maintain accurate, up-to-date, and authoritative parcel data using ArcGIS Parcel Fabric and ArcGIS Pro. 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.

### **Goals**

- Configure the ArcGIS Parcel Fabric environment.
- Edit parcel geometry, measurements, attributes, and labels in a branch versioning environment.

- Track parcel history and lineage to represent land record changes 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.

### **Prerequisites**

Completion of [Creating and Editing Data with ArcGIS Pro](#) or equivalent knowledge.

## Database and Server Management

### Configuring Branch Versioning in ArcGIS

Duration: 1 day

#### **Overview**

Support enterprise multiuser editing workflows.

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 Pro Parcel Fabric.

#### **Goals**

- 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, synchronize offline edits to branch-versioned data, and compare version changes over time.

### **Prerequisites**

Completion of [ArcGIS Pro: Essential Workflows](#) or [Migrating from ArcMap to ArcGIS Pro](#) and [ArcGIS Enterprise: Configuring a Base Deployment](#) or equivalent knowledge.

### ArcGIS Enterprise: Administration Workflows

Duration: 4 days

#### **Overview**

Essential concepts for enterprise administrators.

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 high availability and system performance over time are covered.

#### **Goals**

- 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.

### **Prerequisites**

Completion of [ArcGIS Enterprise: Configuring a Base Deployment](#) or equivalent knowledge.

## **ArcGIS Enterprise: Configuring a Base Deployment**

Duration: 3 days

### **Overview**

Enable Web GIS workflows throughout your organization.

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.

### **Goals**

- 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.

### **Prerequisites**

Familiarity with ArcGIS and enterprise GIS software is recommended but not required.

## **ArcGIS Enterprise on Kubernetes**

Duration:

### **Overview**

Deploy ArcGIS Enterprise in cloud-native technology.

Get started with ArcGIS Enterprise on Kubernetes. Learn how microservices and containerization provide a cloud-native architecture for ArcGIS Enterprise emphasizing scalability, resilience, and maintainability.

### **Goals**

- Understand the advantages of deployment on Kubernetes.
- Configure backup and security.
- Create an organization and tune performance.



## **Prerequisites**

Familiarization with Kubernetes architecture.

## **Distributing Data Using Geodatabase Replication**

Duration: 3 days

### **Overview**

Extend access to GIS data.

This course teaches best practices to plan and implement geodatabase replication to support enterprise editing workflows and data-sharing initiatives. Learn how to protect the integrity and performance of your production database as data is collected and updated to reflect real-world conditions.

### **Goals**

- Determine the number and type of replicas needed to support your organization's GIS workflows and applications.
- Plan an efficient synchronization strategy for replicated data.
- Manage schema changes between replicas.
- Publish replicated data as a hosted feature layer and share it using a web app to support field data collection and editing.

## **Prerequisites**

Experience with enterprise geodatabases and versioned data is required. Completion of [ArcGIS Pro Basics](#) and [Getting Started with Geoprocessing](#) or equivalent knowledge is also required.

## **Deploying and Maintaining a Multiuser Geodatabase**

Duration: 4 days

### **Overview**

Support your organization's data management workflows.

This course prepares you to successfully 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.

Note: During course exercises, you may work with the RDBMS product that is relevant for your organization (Oracle Database 11g Express Edition, Microsoft SQL Server, or PostgreSQL).

### **Goals**

- 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.

## **Prerequisites**

Completion of [ArcGIS Pro: Essential Workflows](#) or equivalent knowledge and experience managing a relational database management system.

## Imagery and Remote Sensing

### Imagery Analysis in ArcGIS Pro

Duration:

#### **Overview**

Transform pixels into information.

This course is for GIS professionals and imagery analysts in the private sector and civilian government agencies who need to extract meaningful information from satellite imagery, unmanned 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.

Are you looking for training on this topic for defence or intelligence professionals? See [this course](#) instead.

#### **Goals**

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

#### **Suggested Skills**

Completion of [ArcGIS Pro: Essential Workflows](#) or [Migrating from ArcMap to ArcGIS Pro](#) or equivalent knowledge.

### Working with Lidar Data in ArcGIS

Duration :2 days

#### **Overview**

Master the basics.

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.

#### **Goals**

- 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.

### **Prerequisites**

Completion of [ArcGIS Pro: Essential Workflows](#) or [Migrating from ArcMap to ArcGIS Pro](#) or equivalent knowledge.

## **Introduction to ENVI Analytics**

Duration :5 days

### **Overview**

Do you need to quickly get up-to-speed on the full-featured functionality offered by ENVI, the premier remote sensing exploitation package?

As an Image Analyst ENVI's workflows and tools is very essential for your image analysis.

### **Goals**

- Perform feature extraction and the object-oriented classification workflow.
- Perform Image display concepts and raster data management.
- Work with vector data in ENVI.
- Perform Image to Map registration and Principal component analysis.
- Extend ENVI using batch processing, Band and Spectral Math, and incorporating your own programs.

### **Prerequisite**

Basic knowledge of Remote Sensing

## **Advanced ENVI Spectral Analytics**

Duration: 5 days

### **Overview**

Discover the power of the spectral analysis tools that make ENVI the industry leader in hyperspectral imagery exploitation. Hyperspectral data analysis allows the identification of materials on the Earth's surface due to the detailed sampling of the electromagnetic spectrum by hyperspectral sensors. This intensive three-day course focuses first on understanding the theory behind hyperspectral imaging, and then challenges the student to apply the theory with ENVI's advanced analysis and mapping algorithms.

### **Goals**

- Perform analysis and derive different results for decision making.
- Perform whole pixel and sub-pixel-based analysis.
- Use hyperspectral data to perform analysis.
- Use different methods for Image mosaicking.
- Detect change from different images. Use regions of interest and classification.
- Work with spectral libraries.

- Preprocess data before using it in any application.

### **Prerequisite**

Introduction to ENVI Analytics, this is an advanced ENVI Class and a working knowledge of ENVI is desirable.

## **ENVI-Extracting Information from LiDAR Data**

# Industry-Focused

## **Configuring Utility Networks in ArcGIS**

Duration: 4 days

### **Overview**

Modernize your utility network infrastructure.

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.

### **Goals**

- Choose a method to migrate existing features into a utility network.
- Configure customizations to enhance network diagrams and tracing and editing workflows.
- Build a utility network using geoprocessing tools.

### **Prerequisites**

Completion of [Working with Utility Networks in ArcGIS](#) or equivalent knowledge.

## **Introduction to Geospatial Concepts for Intelligence**

Duration: 2 days

### **Overview**

Apply geospatial capabilities to support mission success.

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.

### **Goals**

- 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.

### **Prerequisites**

Experience working on a desktop personal computer and with Microsoft Office applications is required.

This course assumes familiarity with ArcGIS Pro. If you are new to ArcGIS Pro, completing the free [ArcGIS Pro Basics](#) web course prior to attending this course is recommended.

## **ArcGIS Enterprise: Analysis Workflows for Intelligence**

Duration:

### **Overview**

Create and share intelligence products in the cloud.

This course—for analysts in the defense, intelligence, and public safety communities—introduces mapping and analysis capabilities available through their 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.

### **Goals**

- 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.

### **Prerequisites**

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.

## **Using ArcGIS for Geospatial Intelligence Analysis**

Duration:

### **Overview**

Mission support that uses the power of location.

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.

## **Goals**

- 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.

## **Prerequisites**

Completion of [Introduction to Geospatial Concepts for Intelligence](#) or equivalent knowledge.

## **Creating and Managing Utility Networks with ArcGIS**

Duration: Three days

### **Overview**

ArcGIS Utility Network Management, an extension to ArcGIS Enterprise, provides robust tools to model, visualize, edit, and analyze complex utility networks. This course—for GIS professionals who edit and analyze electric, gas, water, or telecommunications networks—introduces the utility network model in the enterprise geodatabase. Learn about the latest capabilities that organizations can leverage to better manage network assets, minimize network disruptions, and quickly respond to outages.

### **Goals**

- Deploy a utility network solution and add rules to accurately model connectivity and data relationships.
- 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 impacted customers.
- Create and share a diagram to dynamically visualize the network.

### **Prerequisite**

Completion of ArcGIS Pro: Essential Workflows or Migrating from ArcMap to ArcGIS Pro

## **Using ArcGIS for Public Safety Workflows**

Duration:

### **Overview**

Improve response, increase safety.

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.

### **Goals**

- 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.

### **Prerequisite**

Completion of [Introduction to GIS Using ArcGIS](#) or equivalent knowledge is recommended. Experience with Windows-based software for basic file management and browsing is required.

## **GIS for Humanitarian Assistance**

Duration: Five Days

### **Overview**

The course focuses on the specific skills needed to support emergency relief efforts, with an emphasis on finding, importing, and managing spatial data in regions with poor

infrastructures. The aim of this training is to explore applications of GIS analysis in humanitarian assistance, and more broadly in emergency management.

### **Goals**

- Demonstrate key applications of GIS for humanitarian assistance.
- Apply the geospatial technologies to humanitarian assistance.

## **GIS for Monitoring and Evaluation of Project Activities**

Duration: Five Days

### **Overview**

The course focuses on integrating GIS with Monitoring and Evaluation in project management, thus improving the effectiveness and communications of results to management, funding partners, and beneficiaries. GIS is fundamental in creation and use of maps and charts to help reveal relationships, patterns, and trends for project indicators in a way that is quickly understood by program managers and easy to share.

### **Goals**

- Develop an M&E-GIS System
- Integrate existing M&E data with GIS
- Collect data using mobile phones
- Analyse and visualize M&E data

## GIS for Water Utilities

## GIS for Urban and Regional Planning

## ArcGIS Essential workflows for protected area

Duration:

### **Overview**

Prepare to be productive with ArcGIS Pro.

Extend your foundational GIS knowledge, get comfortable with the ArcGIS Pro application, 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 will give you the experience needed to efficiently work with ArcGIS Pro.

### **Goals**

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

### **Prerequisite**

Completion of [Introduction to GIS Using ArcGIS](#) or equivalent knowledge.

# Mapping and Visualization

## ArcGIS Exploring the Possibilities

Duration:

### **Overview**

Power your organization with location intelligence.

Everyone loves maps, but ArcGIS capabilities go way beyond mapping. This course—for business and technical leaders and staff—explores how organizations use ArcGIS to streamline operations, gain deeper insight from data, and enhance collaboration across business lines. Discover how ArcGIS capabilities work together to enable efficiencies and insight at scale, and get inspired by what's possible when location intelligence is infused throughout the enterprise.

### **Goals**

- Invigorate reports and communications using immersive ArcGIS stories to increase collaboration among teams, project stakeholders, and the public using ArcGIS Hub sites.
- Realize ArcGIS benefits more quickly with people-focused change management and ArcGIS Solutions configured for specific industry workflows and key information products.
- Understand how ArcGIS functions as a system of record, engagement, and insight that supports critical workflows and business needs.
- Enable impactful insight and information-sharing through an ArcGIS portal that enables easy access to geographic data, ready-to-use content, and web maps and apps.

### **Prerequisite**



No experience with GIS or ArcGIS is required.

## Introduction to ArcGIS Indoors

Duration:

### Overview

Bring your GIS inside.

This course introduces key workflows to successfully deploy ArcGIS Indoors. Learn how to create and maintain a complete system for indoor mapping and data management that lets your organization share smart building maps. Get hands-on practice with tools and workflows used to integrate CAD, BIM, and GIS data; create floor-aware data and layers to support indoor navigation; and manage indoor data over time to streamline workspace planning and facilities management. You'll also explore data considerations and data-preparation techniques in ArcGIS Pro.

### Goals

- Import georeferenced CAD and BIM floor plan data into an ArcGIS Indoors geodatabase.
- Build a routable indoor network that supports wayfinding using ArcGIS Indoors apps.
- Create floor-aware maps and 3D scenes.
- Deploy ArcGIS Indoors mobile and web apps to enable individuals to easily navigate a building and reserve meeting rooms and workspaces.

### Prerequisite

Completion of [ArcGIS Pro: Essential Workflows](#) or [Migrating from ArcMap to ArcGIS Pro](#) and [ArcGIS Indoors Basics](#) or equivalent knowledge.

## Creating Mapping and Visualization Products Using ArcGIS

Duration:

### Overview

For decades, ArcGIS software has been used to visualize geographic data by creating maps. With ArcGIS Pro, you can still create traditional 2D maps, but you can also create other types of visualizations, such as 3D scenes, animations, charts, and web maps. In this course, you will learn the basics you need to know to create effective visualizations that fulfill their intended purpose and meet the needs of your audience. You will learn some foundational cartographic concepts, and how to apply them to different types of information products.

### Goals

After completing this course, you will be able to perform the following tasks:

- Prepare data for a mapping project.
- Design map elements that are appropriate for your data, audience, map purpose, and delivery medium.
- Apply 2D and 3D cartographic best practices to create and share print maps, web maps, and 3D scenes.

- Create animations to visualize dynamic data and change over time.

### **Prerequisite**

## **Preparing data for GIS Applications**

Duration:

### **Overview**

This course covers aspects of data needed for GIS projects, from data sources and metadata to evaluation of different datasets across five different elements of data quality. You will consider the data needs for a GIS project, acquire and prepare data, evaluate the quality of GIS data, modify data for a project, and document evaluation results in metadata.

### **Goals**

After completing this course, you will be able to perform the following tasks:

- Consider data needs for a GIS project
- Acquire data for a GIS project
- Assess the quality of GIS data
- Modify data to use in a project

### **Prerequisite**

## **Creating stories with ArcGIS**

Duration:

### **Overview**

ArcGIS Story Maps helps you inform, engage, and inspire your audience by harnessing the power of maps and geography to tell your story. You can do more with stories than identify the best restaurants in town or nearby historical landmarks. Organizations can use stories to communicate policy, involve the community, promote a cause, demonstrate benefits, provide public information about an event, educate, or simply inspire.

Using stories, you can combine authoritative maps and data with narrative text, photos, and multimedia content without the need for any web development or coding expertise. This course introduces you to ArcGIS Story Maps. You will learn the basic principles of storytelling and how to build, edit, publish, and share your story publicly, on social media, or within your organization. You will use themes to customize the design of your stories and story collections to group content for easy access and sharing. You will create stories to inform and inspire your audience with place-based multimedia experiences. You will also learn new ways and best practices to communicate with maps and effectively use your data.

### **Goals**

- After completing this course, you will be able to perform the following tasks: Understand the skills and role of the storyteller involved in creating successful stories using the ArcGIS Story Maps builder.
- Plan for the use and implementation of stories within an organization.
- Apply standard workflows and best practices to create and optimize stories for an engaging user experience.
- Publish and share stories.

| Acronym2 | current courses  | No of days | Cost (Kenya) | Cost (UG/TZ) |
|----------|--|------------|--------------|--------------|
| AGON     | ArcGIS Online: Essential Workflows                       | 2          | 300          | 260          |
| APEW     | ArcGIS Pro: Essential Workflows                          | 5          | 750          | 650          |
| BRAV     | Configuring Branch Versioning in ArcGIS                  | 2          | 300          | 260          |
| CUTI     | Configuring Utility Networks in ArcGIS                   | 3          | 450          | 390          |
| CWAB     | Configuring Web Apps Using ArcGIS Web AppBuilder         | 2          | 300          | 260          |
| DASH     | Get Started with ArcGIS Dashboards                       | 1          | 150          | 130          |
| EADM     | ArcGIS Enterprise: Configuring a Base Deployment         | 4          | 600          | 520          |
| EBAS     | ArcGIS Enterprise: Configuring a Base Deployment         | 3          | 450          | 390          |
| EDAP     | Creating and Editing Data with ArcGIS Pro                | 3          | 450          | 390          |
| EKBC     | ArcGIS Enterprise on Kubernetes                          | 3          | 450          | 390          |
| ESHA     | Sharing Content to ArcGIS Enterprise                     | 3          | 450          | 390          |
| EXPO     | ArcGIS Exploring the possibilities                       | 3          | 450          | 390          |
| FIDA     | Field data collection and management                     | 3          | 450          | 390          |
| GCON     | Introduction to Geospatial Concepts for Intelligence     | 3          | 450          | 390          |
| GDAT     | Managing Geospatial Data in ArcGIS                       | 3          | 450          | 390          |
| GISA     | Introduction to GIS Using ArcGIS                         | 3          | 450          | 390          |
| GREP     | Distributing Data Using Geodatabase Replication          | 3          | 450          | 390          |
| INDR     | Introduction to ArcGIS Indoors                           | 4          | 600          | 520          |
| IMAD     | ArcGIS Enterprise: Analysis Workflows for Intelligence   | 3          | 450          | 390          |
| IMAP     | Image analysis in ArcGIS Pro                             | 3          | 450          | 390          |
| LOAN     | Location Analytics Using ArcGIS Insights                 | 3          | 450          | 390          |
| LIDR     | Working with Lidar Data in ArcGIS                        | 2          | 300          | 260          |
| MMGD     | Deploying and Maintaining a Multiuser Geodatabase        | 3          | 450          | 390          |
| MVIZ     | Creating Mapping and Visualization Products Using ArcGIS | 3          | 450          | 390          |
| NTEL     | ArcGIS Enterprise: Analysis Workflows for Intelligence   | 3          | 450          | 390          |
| PADA     | Working with Parcel Data in ArcGIS Pro                   | 4          | 600          | 520          |
| PAGO     | Putting ArcGIS across your organization                  | 3          | 450          | 390          |
| INDR     |  |            | 0            | 0            |
|          | ArcGIS Pipeline Referencing                              |            | 0            | 0            |
| PADA     |  |            | 0            | 0            |
| DASH     |  |            | 0            | 0            |
| PRED     | Preparing data for GIS Applications                      | 3          | 450          | 390          |
| PROM     | Migrating from ArcMap to ArcGIS Pro                      | 3          | 450          | 390          |
| PYTS     | Creating Python Scripts for ArcGIS                       | 4          | 600          | 520          |
| SNAP     | Spatial Analysis Using ArcGIS Pro                        | 4          | 600          | 520          |
| STAR     | Creating stories with ArcGIS                             | 2          | 300          | 260          |
| UAGA     | Using ArcGIS for Geospatial Intelligence Analysis        | 3          | 450          | 390          |
| UTIL     | Creating and Managing Utility Networks with ArcGIS       | 3          | 450          | 390          |
|          | Introduction to ENVI Analytics                           | 5          | 750          | 650          |
|          | Advanced ENVI Spectral Analytics                         | 5          | 750          | 650          |
|          | ENVI-Extracting Information from LiDAR Data              | 3          | 450          | 390          |
|          | Using ArcGIS for Public Safety Workflows                 | 3          | 450          | 390          |

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|---|---|-----|-----|
| GIS for Humanitarian Assistance                         | 5 | 750 | 650 |
| GIS for Monitoring and Evaluation of Project Activities | 5 | 750 | 650 |
| GIS for Water Utilities                                 | 5 | 750 | 650 |
| GIS for Urban and Regional Planning                     | 5 | 750 | 650 |
| ArcGIS Essential workflows for protected area           | 5 | 750 | 650 |