

Esri Training

Apply what you learn to your job right away



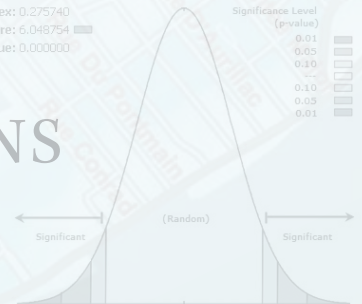
SOLUTIONS

Spatial Autocorrelation Report

Moran's Index: 0.275740
Z Score: 6.048754
p-value: 0.000000

Significance Level (p-value)

Significance Level (p-value)	Critical Value (z-score)
0.01	< -2.58
0.05	-2.58 - -1.96
0.10	-1.96 - -1.65
---	-1.65 - 1.65
0.10	1.65 - 1.96
0.05	1.96 - 2.58
0.01	> 2.58



GIS

Training



Issued July
2011

Instructor-Led Courses
ESRI COURSE CATALOG





Dear Colleague:

Over this past year, Esri has brought a fundamentally different experience to our users with ArcGIS 10. ArcGIS 10 is a pervasive and simplified yet extremely rich system for using maps and GIS. We've added temporal, or time-based, elements throughout this release. It's truly a 3D GIS in visualization, analytics, editing, and modeling. Imagery is fully integrated with fast display. And it's built for accessibility through many clients—desktop, enterprise, mobile, web, and cloud.

Not only did we bring you more functionality, we've also made using and sharing GIS easier with tools, templates, and a more intuitive interface. These enhancements will drive higher levels of productivity, enable powerful spatial analysis, and create new ways for you to share geographic insights.

With the release of ArcGIS 10, we've created a full range of training courses to speed your adoption of these new capabilities. Staying current with the latest technology will give you a competitive edge and help you address social, economic, business, and environmental issues that shape our world.

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". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Jack Dangermond

Esri Technical Certification Program

The Esri Technical Certification Program is designed to create a workforce highly skilled in applying Esri best practices to advance the goals of its members' organizations. The program consists of 13 certifications recognizing expertise in desktop, developer, or enterprise use of ArcGIS. Learn more on page 24 or at esri.com/certification.

Find Out More about Esri Training

For the latest class schedules and detailed course descriptions and to register, visit esri.com/coursecatalog.

To talk with an Esri training consultant, call 1-800-447-9778, extension 1-5757.

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Training for All Learning Styles

Successful organizations know that investing in staff development is an effective strategy to reduce costs, streamline operations, and improve business results. Benefits of GIS training include

- Increased productivity and efficiencies in GIS operations so staff are enabled to accomplish more with fewer resources
- Prevention of costly mistakes in new GIS implementations and system updates
- Knowledgeable staff better able to recognize opportunities for GIS to help an organization increase operating efficiencies, build its customer base, stay ahead of the competition, and increase revenue

Esri offers instructor-led and self-paced training solutions that teach real-world GIS problem-solving skills and best practices to accomplish GIS workflows. Esri closely monitors new training technologies to offer creative and cost-effective solutions to our users.

To learn more about Esri training solutions and subscribe to our free e-newsletter, visit esri.com/trainingnews.

For available self-paced web courses and training seminars, visit esri.com/coursecatalog.

Instructor-Led Training

Traditional Classroom Course	<ul style="list-style-type: none"> • Taught by a certified Esri instructor with expertise in the course subject matter • Hands-on practice with the latest Esri software • Ability to ask questions and get immediate answers • Class activities and discussions encouraging peer-to-peer learning • Dedicated time away from the office to focus on learning • Available at Esri Learning Centers nationwide
Online Classroom Course	<ul style="list-style-type: none"> • Real-time class taught online by a certified Esri instructor with expertise in the course subject matter • All the benefits of a traditional classroom experience • Convenient attendance from your desktop • No travel required
Instructor-Led Course Offered by Professional Services	<ul style="list-style-type: none"> • Taught by instructors with expertise in specific industry solutions and projects • Can accommodate customized solutions for specific customer requests

Self-Paced Training

Web Course	<ul style="list-style-type: none"> • Focused, task-based training that includes demonstrations and hands-on software exercises • Independent study at your own pace • Access available 24/7 via a broadband Internet connection
Training Seminar	<ul style="list-style-type: none"> • One-hour technical presentation and demonstrations delivered by Esri subject matter experts • Access available 24/7 via a broadband Internet connection • No cost

Instructor-Led Course Delivery Options

Esri instructor-led courses are taught online in real time and at numerous learning centers in the United States including Esri's corporate headquarters in Redlands, California, and at regional office locations. See the map on the inside back cover for learning center locations. View the technical requirements to attend an instructor-led course online at esri.com/onlineclassroom.

Client-Site Classes

Esri can bring instructor-led courses to your facility. A client-site class can be the most cost-effective training solution when an organization has seven or more staff that require the same course. The Esri mobile lab option is available at no extra charge for all client-site training classes. With this option, Esri provides classroom setup service and equipment for each student, including preconfigured hardware and Esri® software.

Private Classes

For organizations that would like to train multiple staff (up to a maximum of 12 students) but do not have a training facility at their site, holding a private class at an Esri Learning Center or online is another cost-effective training solution.

To discuss arranging a client-site or private class, call 1-800-447-9778, extension 1-5757, or send an e-mail to GIStraining@esri.com.

Client Coaching Services

Organizations that host an Esri instructor-led class at their site or arrange a private class at an Esri Learning Center may supplement the standard class with one or more days of client coaching. Client coaching enhances the learning experience by providing extra time to review and practice course concepts with an instructor's on-site guidance.



Instructor-Led Format Improves User Success

With the introduction of ArcGIS 10, Esri has made a substantial investment in upgrading course design and instructor skills. The new instructor-led course design creates a more immersive, experiential approach to learning that will help students more quickly and fully apply new skills and knowledge in their daily work.

This redesign incorporates proven adult-learning principles and focuses on interaction and skills application. The course format includes

- Interactive presentations with students contributing real-world experiences
- Demonstrations
- Hands-on individual exercises
- Facilitated group exercises
- Class discussions and problem-solving scenarios that encourage peer-to-peer learning

The result is a more effective and engaging experience that covers the spectrum of learning styles to ensure that students acquire relevant and directly applicable workplace knowledge and skills.

GIS Knowledge

+

Student Engagement and Interaction

+

Adult Learning Principles

+

ArcGIS Skills Application

=

Successful GIS Professionals

“We’ve made a significant investment in course redesign and instructor skills to keep Esri on the cutting edge of training delivery. The emphasis on application of skills and knowledge is critical in helping users maximize investments they’ve made in GIS technology.”

— Nick Frunzi,
Educational Services Director

High-Caliber Instructor Skills

All Esri instructors have achieved Esri Technical Certification and CompTIA CTT+ certification. CompTIA CTT+ is an international certification that covers core instructor skills, including preparation, presentation, communication, facilitation, and evaluation, in both a traditional and online classroom environment.

With the new course design, certified Esri instructors have the flexibility to adapt how they present course material based on the audience composition, skill level, and professional interests of each class. This format stretches their creativity and teaching skills in a way that’s exciting and beneficial for students.

Format Applies to Traditional and Online Courses

Interactive learning is a proven approach that works well in both traditional and online classrooms.

In an Esri instructor-led online course, students participate in small group activities in virtual breakout rooms, including writing on group whiteboards, chatting, polling, and probing. Students can interact with each other and the instructor during presentations, demonstrations, and exercises. Instructors can even shadow students’ computers to monitor student progress during individual exercises or to check in on groups and facilitate discussion.

Task-Based Web Course Design

At ArcGIS 10, Esri Virtual Campus web courses have been redesigned to provide about three hours of focused, self-paced instruction for a variety of GIS tasks. The new web course design features interactive conceptual material, demonstrations, and hands-on exercises designed to help students apply and reinforce ArcGIS® software skills. Web courses are accessible on demand, 24/7, from the Esri Training website. Find out more and see a list of web courses at esri.com/coursecatalog.

Desktop GIS helps users visualize, create, edit, and analyze geographic data and create professional-quality maps, reports, and graphs from their desktops.

Server GIS enables delivery of GIS capabilities to users across a large enterprise, including field operations.

Esri offers an integrated portfolio of software products to build a complete GIS. The ArcGIS system enables organizations to deploy GIS functionality wherever it's needed—the desktop; the server; or custom applications delivered via networks, the web, mobile applications, or the cloud. The primary ArcGIS products are ArcGIS Desktop and ArcGIS Server.

ArcGIS Desktop helps users discover patterns, relationships, and trends in data that aren't readily apparent in databases, tables, and spreadsheets.

ArcGIS Desktop gives you the power to manage and integrate data, perform analysis, model and automate workflows, and display results to drive decisions based on geographic insight. The following courses will help you get started with ArcGIS Desktop:

- **ArcGIS Desktop I: Getting Started with GIS**—This course introduces fundamental GIS concepts and basic ArcGIS skills to those with no prior GIS or workplace experience.
- **ArcGIS Desktop II: Tools and Functionality**—For those who have an education or experience in GIS but no ArcGIS software experience and want to learn about its functionality and acquire basic skills. (Those working in geospatial intelligence or law enforcement should take Introduction to ArcGIS for Geospatial Intelligence and Law Enforcement.)
- **ArcGIS Desktop III: GIS Workflows and Analysis**—For ArcGIS Desktop users who want to extend their skills in data creation and editing, geoprocessing models, and GIS analysis.

ArcGIS Server gives organizations the capability of publishing their GIS data, tasks, and functions as services throughout the enterprise.

Esri server GIS is IT compliant and interoperable with other enterprise software such as customer relationship management (CRM) and enterprise resource planning (ERP) systems. The courses below will help you get started with ArcGIS Server:

- **Introduction to ArcGIS Server**—For GIS professionals who want to learn how to share their work as maps, globes, or geoprocessing tasks
- **ArcGIS Server: Web Administration Using the Microsoft .NET Framework**—For IT administrators who will be responsible for implementing and supporting ArcGIS Server
- **Building Web Applications Using ArcGIS API for JavaScript, Building Web Applications Using ArcGIS API for Flex, or Building Web Applications Using ArcGIS API for Microsoft Silverlight/WPF**—For developers who want to create rich Internet applications that take full advantage of the powerful mapping, geocoding, and geoprocessing capabilities of ArcGIS services

Visit esri.com/coursecatalog to use the Course Recommendations tool to find courses based on your GIS training needs or to search the entire training catalog.

ArcGIS Desktop I: Getting Started with GIS

Two days (16 hours)—\$1,010

Overview

This course teaches the fundamental concepts and basic functions of a GIS, the properties of GIS maps, and the structure of a GIS database. In course exercises, you will develop basic software skills by working with ArcGIS Desktop tools to visualize geographic data, create maps, query a GIS database, and analyze data using common analysis tools.

Who Should Attend

- Individuals who do not have any prior GIS education or workplace experience with GIS
- Managers and GIS support staff who infrequently use ArcGIS and need to understand how GIS fits into their organization

Goals

After completing this course, you will be able to

- Understand what GIS is, what it can do, and how others are using it.
- See how your organization can benefit from a GIS.
- Create a basic GIS map.
- Work with different types of geographic data.
- Access information about geographic datasets and features.
- Apply a systematic approach to analyzing data to find patterns and relationships.

Prerequisites: None

ArcGIS Desktop II: Tools and Functionality

Three days (24 hours)—\$1,515

Overview

This course introduces the fundamental concepts of ArcGIS Desktop software and teaches how to use it to visualize, create, manage, and analyze geographic data. In course exercises, you will use ArcGIS tools to perform common GIS tasks and workflows. By the end of the course, you will understand the range of ArcGIS Desktop functionality and be prepared to work with the software on your own to create GIS maps, work with geographic data, and perform GIS analysis.

Who Should Attend

GIS professionals and others who have GIS knowledge but no ArcGIS software experience

Goals

After completing this course, you will be able to

- Create a file geodatabase to store and manage geographic data.
- Create and edit geographic data to accurately represent real-world objects.
- Explore geographic data in ArcMap.
- Classify, symbolize, and label map features to improve map visualization and interpretation.
- Create data from x,y coordinates and by geocoding addresses.
- Query and analyze GIS data to support decision making.
- Create presentation-quality maps.

Prerequisites: Yes*

ArcGIS Desktop III: GIS Workflows and Analysis

Two days (16 hours)—\$1,010

Overview

Advance your ArcGIS Desktop skills in this course that teaches how and when to apply ArcGIS tools to create an efficient workflow that supports GIS analysis. Working with data stored in a geodatabase, you will organize and prepare data for analysis, create geoprocessing models, and work through a challenging analysis project. By the end of the course, you will be able to determine which ArcGIS tools and functions to use in a given situation and apply them to your analyses. The skills taught in this course are applicable to all types of GIS analysis.

Who Should Attend

GIS analysts, specialists, and other experienced ArcGIS users who want to extend their basic ArcGIS skills in creating and editing data, using geoprocessing models, and performing GIS analysis

Goals

After completing this course, you will be able to

- Add data from different sources to a geodatabase.
- Create and use geodatabase components that maintain data integrity and prevent errors during data creation and editing.
- Solve common spatial data alignment problems.
- Use a variety of geoprocessing tools to perform an analysis that supports decision making.
- Build a complex model to automate an analysis workflow.

Prerequisites: Yes*

“Very instructive, easy to follow, and included ‘real life’ situations during lectures and in exercises.”

— Malcolm Castor,
Environmental Specialist
Affordable Housing Office

Introduction to ArcGIS for Geospatial Intelligence and Law Enforcement

Three days (24 hours)—\$1,515

Overview

This course uses terminology, scenarios, and data relevant to your daily work in geospatial intelligence or law enforcement to teach essential ArcGIS skills that support your organization's mission. You will learn how to perform GIS tasks such as displaying, querying, and editing geographic data. The course includes a capstone exercise in which you independently work through a realistic scenario.

Who Should Attend

Analysts and professionals working in defense, intelligence, homeland security, and law enforcement

Goals

After completing this course, you will be able to

- Work with tabular data similar to significant activities information contained in a spreadsheet.
- Select features for help in route reconnaissance.
- Find features based on their locations to other features, such as hazmat-capable fire stations closest to a chemical sensor.
- Edit data using ground truthing and heads-up digitizing.
- Associate tables from a database with geographic data for link analysis.
- Perform spatial analysis by combining geographic datasets.
- Produce maps for operational and intelligence command briefings.

Prerequisites: Yes*

What's New in ArcGIS Desktop 10

Two days (16 hours)—\$1,010

Overview

ArcGIS 10 introduces significant interface improvements and tighter integration of ArcMap, ArcCatalog, and Python scripting to make data visualization, analysis, and map production faster and easier. In this course, you will explore the major enhancements included in ArcGIS 10. Course exercises provide hands-on practice with many of the new tools and workflows for mapping, editing, analyzing, and documenting your GIS data.

Who Should Attend

Experienced ArcGIS Desktop 9.x users who need to learn the new features and workflows of ArcGIS 10

Goals

After completing this course, you will be able to

- Quickly access data, maps, and geoprocessing tools in ArcMap.
- Apply the new streamlined sketch-based editing workflow to create and edit feature geometry and attributes.
- Create attractive, professional-quality maps using basemaps, operational layers, and new styles and symbols.
- Work with time-aware and 3D data on a map.
- Use Python scripts in ArcMap to automate common geoprocessing tasks.
- Quickly produce a map series using Data Driven Pages.

Prerequisites: Yes*

Introduction to ArcGIS Desktop for Mining Geoscience

Three days (24 hours)—\$1,515

Overview

This course introduces the ArcGIS tools used to accomplish mining geoscience workflows. In course exercises, you will develop basic ArcGIS skills and apply them to solve mining geoscience problems such as detecting mineral occurrence patterns, locating prospective deposits, and identifying optimal areas for mineral exploration.

Who Should Attend

Geoscientists who work in the mining industry and need to use ArcGIS Desktop software to perform GIS operations and analysis

Goals

After completing this course, you will be able to

- Understand how GIS is used for geoscience applications.
- Create presentation-quality geologic maps and graphs.
- Generate and view statistics for geoscience data.
- Use ArcGIS analysis tools to detect mineral occurrence patterns and identify optimal areas for mineral exploration.
- Create a geodatabase to store geologic, geochemical, geophysical, and raster data.
- Create a model to automate the GIS operations used to locate prospective deposits.

Prerequisites: Yes*

What's New in Editing at ArcGIS Desktop 10

One day (8 hours)—\$505

Overview

At ArcGIS 10, the ArcMap editing environment has been simplified and enhanced to provide a more intuitive, sketch-based editing experience. This course introduces the new editing interface and key workflows you need to understand to efficiently create and maintain your GIS data.

Who Should Attend

Experienced ArcGIS Desktop 9.x users who need to learn the new editing framework of ArcGIS 10

Goals

After completing this course, you will be able to

- Apply the new editing workflow in ArcMap.
- Create and work with templates to create new features and edit existing features.
- Understand the new snapping environment and modify it as needed.
- Digitize new line features and edit existing line features using a variety of tools.
- Create true curves.
- Create and update parcels using Parcel Editor.

Prerequisites: Yes*

Cartography with Esri Production Mapping

Two days (16 hours)—\$1,010

Overview

Esri Production Mapping provides cartographic tools for creating and managing high-quality, high-volume map products and reference grids based on product specifications. In this course, you will work with Esri Production Mapping cartographic tools to create and manage map documents in the product library, symbolize data with views and the Visual Specifications tool, work with geographic representations, and create dynamic tables in the layout.

Who Should Attend

GIS technicians, spatial data managers, and project managers who are involved in creating cartographic products using Esri Production Mapping

Goals

After completing this course, you will be able to

- Manage cartographic production with the product library.
- Create cartographic data such as grids and graticule layers.
- Symbolize data using views and the Visual Specifications tool.
- Edit cartographic features using representations.
- Create and manage layouts and elements such as dynamic tables.
- Print, publish, and export cartographic products.
- Maintain cartographic products.

Prerequisites: Yes*

Introduction to Esri Aeronautical Solution

Three days (24 hours)—\$1,515

Overview

This course teaches how to use Esri Aeronautical Solution to produce and maintain aeronautical charts inside an Aeronautical Information Exchange Model (AIXM) 4.5/5.1-based Aeronautical Information System (AIS). You will learn about the data management, annotation, and editing tools that support the aeronautical chart production process.

Who Should Attend

Individuals familiar with aeronautical principles and charting who create, edit, or maintain an Aeronautical Information System or produce aeronautical charts from a database

Goals

After completing this course, you will be able to

- Edit and attribute aeronautical features using Feature Builder.
- Create and manage cartographic features for chart production.
- Use the aeronautical annotation editing tools.
- Build and configure smart aeronautical surround elements.
- Track and review changes in the database with Change Reporter and ArcGIS Data Reviewer.
- Use workflow management tools: ArcGIS Workflow Manager and Task Assistant Manager.
- Manage obstacle coverage area creation.

Prerequisites: Yes*

Creating and Publishing Maps with ArcGIS

Three days (24 hours)—\$1,515

Overview

Focusing on fundamental cartographic design principles, this course teaches how to create attractive maps that are easy to interpret and properly designed for their audience and delivery medium. You will learn to produce high-quality, database-driven maps by applying a standard cartographic workflow. Some course exercises use tools provided in ArcGIS Spatial Analyst and Maplex for ArcGIS.

Who Should Attend

- Experienced ArcGIS users with no cartographic experience
- Experienced cartographers with limited ArcGIS experience who want to create database-driven maps

Goals

After completing this course, you will be able to

- Plan a cartographic project.
- Evaluate data for cartographic purposes.
- Create appropriate symbology, map elements, and layout designs for different types of maps.
- Create labels and annotation that are easy to read by the map's intended audience.
- Apply a standard cartographic workflow to create maps efficiently using ArcGIS.
- Produce maps for a variety of delivery media, including a web mapping application.

Prerequisites: Yes*

Configuring Esri Aeronautical Solution

Two days (16 hours)—\$1,010

Overview

This course teaches how to configure Esri Aeronautical Solution to produce and maintain aeronautical charts inside an Aeronautical Information Exchange Model (AIXM) 4.5/5.1-based Aeronautical Information System (AIS). You will learn to set up the production environment, design grids, and configure the workflow environments for ArcGIS Workflow Manager and Task Assistant Manager.

Who Should Attend

Individuals familiar with aeronautical principles and charting who will be involved with supporting an aeronautical charting system using Esri Aeronautical Solution

Goals

After completing this course, you will be able to

- Set up extraction queries for cartographic feature creation.
- Configure the Visual Specifications tool for charting products.
- Configure and manage masking rules using Masking Rule Manager.
- Create batch jobs for quality control.
- Configure the change detection process for ArcGIS Data Reviewer.
- Configure Task Assistant Manager for ArcMap task-oriented processes.

Prerequisites: Yes*

Introduction to Esri Production Mapping

Five days (40 hours)—\$2,525

Overview

Esri Production Mapping (formerly PLTS for ArcGIS—Foundation) is an extension to ArcGIS Desktop developed for high-volume database production, maintenance, and quality control. In this course, you will learn to load and edit data using Esri Production Mapping tools, perform data QC using ArcGIS Data Reviewer, create and manage maps with the Product Library, and manage workflows using ArcGIS Workflow Manager.

Who Should Attend

GIS specialists, technicians, spatial data managers, project managers, and other experienced ArcGIS users who need to manage and publish accurate data and cartographic products using standardized and repeatable workflows

Goals

After completing this course, you will be able to

- Load data using the Data Loader.
- Edit and attribute features using Esri Production Mapping.
- Run automated data validation checks.
- Symbolize features using Views and Visual Specifications.
- Edit cartographic representations using the representation tools.
- Create and manage map documents with the Product Library.
- Create and process jobs using ArcGIS Workflow Manager.

Prerequisites: Yes*

Introduction to Esri Nautical Solution

Five days (40 hours)—\$2,525

Overview

This course teaches how to use Esri Nautical Solution to produce and maintain standards-compliant nautical products (S-57 and hard-copy charts) in a desktop production environment or in a central, enterprise Nautical Information System (NIS).

Who Should Attend

Individuals familiar with nautical standards and charting who will be involved in creating and maintaining an NIS or producing nautical products from a database

Goals

After completing this course, you will be able to

- Load nautical product data.
- Edit and attribute nautical features.
- Run automated data validation checks.
- Perform a visual review of nautical data.
- Understand symbology representations and implement them with the Visual Specifications tool.
- Create reference grids.
- Export nautical products.

Prerequisites: Yes*

Introduction to Esri Defense Mapping

Five days (40 hours)—\$2,525

Overview

This course teaches how to work with and edit data using Esri Defense Mapping. You will learn to load and edit data using Esri Defense Mapping tools, perform data quality control (QC) using ArcGIS Data Reviewer, create and manage maps with the Product Library, and manage workflows using ArcGIS Workflow Manager. This course is typically offered as a client-site class.

Who Should Attend

Experienced ArcGIS users who will produce data and maps under defense or military specifications and standards

Goals

After completing this course, you will be able to

- Load data using Data Loader.
- Edit features using Esri Defense Mapping tools.
- Run automated data validation checks.
- Symbolize features using views and the Visual Specifications tool.
- Edit cartographic representations using the representation tools.
- Create and manage map documents with the Product Library.
- Create and process jobs using ArcGIS Workflow Manager.

Prerequisites: Yes*

Cartography with PLTS—Nautical Solution

Three days (24 hours)—\$1,515

Overview

PLTS for ArcGIS—Nautical Solution allows you to manage complex classifications for symbols, labels, and nautical chart elements while maintaining quality control and compliance with nautical and hydrographic standards. This course teaches how to cartographically finish a nautical chart product from start to finish using PLTS—Nautical Solution.

Who Should Attend

Individuals familiar with nautical charts who will be involved in producing and maintaining nautical charts using PLTS—Nautical Solution

Goals

After completing this course, you will be able to

- Manage map documents that contain multiple data frames.
- Create and edit cartographic representations.
- Generate reference grids.
- Manage labels and create annotation.
- Perform cartographic edits such as geometric effects, representation overrides, and free representations.
- Manage page layout.
- Create a source diagram.
- Create and manage map surround elements and marginalia.
- Export to various raster formats.

Prerequisites: Yes*

Data Editing with Esri Production Mapping

Three days (24 hours)—\$1,515

Overview

Esri Production Mapping is a collection of software applications developed to extend ArcGIS for high-volume database production, maintenance, and quality control. In this course, you will learn to create a production geodatabase and establish validation rules. You will also gain proficiency with the editing, attribution, and data loading tools included with Esri Production Mapping.

Who Should Attend

GIS technicians, spatial data managers, and project managers who will be involved in creating and maintaining production data with Esri Production Mapping

Goals

After completing this course, you will be able to

- Construct a production geodatabase.
- Create, edit, and maintain validation rules in the product library.
- Load data using Data Loader.
- Edit and attribute features using Esri Production Mapping.
- Use the Production Mapping Contour and 3D editing tools.
- Work with tools specific to an Esri mapping and charting solution.

Prerequisites: Yes*

Data Production and Editing Techniques

Three days (24 hours)—\$1,515

Overview

This course teaches methods for accurately creating and editing data stored in a geodatabase. You will learn a recommended workflow for data automation and practice with tools and techniques that help ensure data integrity during editing. Each class day concludes with a project in which you will apply the recommended techniques on your own.

Who Should Attend

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

Goals

After completing this course, you will be able to

- Migrate data stored in different formats to the geodatabase.
- Solve common coordinate system problems to ensure that data is located correctly and aligns properly with other data.
- Efficiently create and modify features using ArcGIS tools.
- Apply geodatabase rules that maintain data integrity during editing.
- Document data to support sharing and appropriate use of the data.

Prerequisites: Yes*

Quality Control Using ArcGIS Data Reviewer

Two days (16 hours)—\$1,010

Overview

This course teaches how to use ArcGIS Data Reviewer to find, track, and correct spatial and attribute errors in GIS data. You will learn about the more than 40 automated checks that you can configure and run on your data as well as all the visual review tools that are available to aid in documenting anomalies or errors.

Who Should Attend

- GIS technicians, spatial data managers, and project managers who perform data quality checks using ArcGIS Data Reviewer
- Anyone working with Esri Production Mapping, Esri Defense Mapping, or a stand-alone license of ArcGIS Data Reviewer

Goals

After completing this course, you will be able to

- Understand quality assurance/quality control (QA/QC) concepts.
- Run automated data checks.
- Create a batch job for performing a cumulative data review.
- Perform a visual review of GIS data.
- Track and manage errors in the Reviewer table.
- Work with correction and verification modes.

Prerequisites: Yes*

Working with CAD Data in ArcGIS Desktop

One day (8 hours)—\$505

Overview

Knowing how to integrate computer-aided design (CAD) data into GIS workflows will help you streamline GIS data editing, enhance GIS maps, and perform GIS analyses. In this course, you will learn how to display CAD data with GIS layers in ArcGIS, use CAD data directly in ArcGIS geoprocessing and analysis operations, and import CAD data into a geodatabase. Techniques and best practices for data conversion to support integrated CAD/GIS workflows are covered.

Who Should Attend

GIS specialists, analysts, data managers, and other experienced ArcGIS users who need to work with CAD data in ArcGIS and experienced CAD users who have basic ArcGIS skills

Goals

After completing this course, you will be able to

- Explore CAD data organization, properties, and attributes in ArcGIS.
- Display and symbolize CAD data in ArcGIS.
- Use CAD feature classes as input for GIS analysis operations.
- Georeference CAD data to align with GIS data.
- Convert a CAD feature class to a geodatabase feature class.
- Prepare geodatabase feature classes for export to a complex CAD drawing file that contains attributed CAD entities.
- Create a model to automate CAD data conversion and append the output to an existing geodatabase feature class.
- Evaluate analysis results and present them to decision makers.

Prerequisites: Yes*

Working with 3D GIS Using ArcGIS

Two days (16 hours)—\$1,010

Overview

At version 10, ArcGIS 3D Analyst supports a complete solution for 3D GIS. This course teaches fundamental concepts of 3D GIS as you learn how to visualize, edit, model, and analyze GIS data within a 3D context.

Who Should Attend

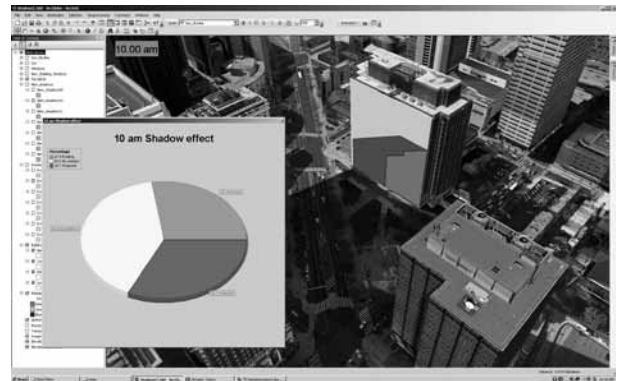
GIS analysts, planning professionals, geospatial intelligence analysts, and other experienced ArcGIS users who want to create, manage, analyze, and share 3D data

Goals

After completing this course, you will be able to

- Visualize GIS data in 3D globe and local perspectives.
- Create and import 3D data.
- Edit and maintain 3D vector data in a 3D environment.
- Perform 3D analyses, including viewshed, visibility, volumetric, and terrain analyses, on vector and raster data.
- Use best practices to optimize 3D views for use on the desktop.
- Visualize temporal data in 3D by enabling time and creating 3D animations.

Prerequisites: Yes*



With a 3D virtual city, you can analyze the shadow effect of a proposed building on surrounding structures.

Performing Analysis with ArcGIS Desktop

Three days (24 hours)—\$1,515

Overview

In this course, you will acquire or improve skills to generate reliable results from different types of GIS analyses. The course teaches a proven process you can use to solve a variety of spatial problems including site selection, line-of-sight (visibility) analysis, and hot spot analysis. You will also learn regression analysis techniques for determining why a spatial pattern exists. Some course exercises use tools provided in the ArcGIS Spatial Analyst extension.

Who Should Attend

GIS analysts, specialists, and other experienced ArcGIS Desktop users who manage or conduct GIS analysis projects

Goals

After completing this course, you will be able to

- Apply best practices to choose appropriate data, analysis methods, and GIS tools for a given project.
- Prepare vector and raster data for analysis.
- Build and modify a geoprocessing model to automate analysis tasks, examine what-if scenarios, and compare results.
- Create a weighted suitability model to select the best location for a new site.
- Apply spatial statistics to analyze, interpret, and quantify geographic data.
- Build a regression model to help determine why a spatial pattern exists.
- Evaluate analysis results and present them to decision makers.

Prerequisites: Yes*

Working with ArcGIS Spatial Analyst for Geospatial Intelligence

Four days (32 hours)—\$2,020

Overview

Acquire the skills needed to perform spatial modeling and analysis to assess threats and manage responses to potential threat events. You will learn fundamental raster concepts and a workflow for creating information that provides the intelligence support needed for mission success. The course includes a one-day, scenario-based team exercise in which you will build a spatial model to help answer questions about recent intelligence information.

Who Should Attend

Analysts in defense, intelligence, and law enforcement agencies who support the planning and management of responses to potential and actual threat events

Goals

After completing this course, you will be able to

- Generate and prepare data, including imagery, for use in models.
- Perform analyses to determine line of sight and visibility of features from specific viewing points.
- Create distance models to find efficient paths between locations.
- Create risk models to identify critical infrastructure.
- Develop suitability models to identify optimal locations for resource deployment.
- Build a spatial model to analyze a potential threat event.
- Produce general threat rating and vulnerability maps.

Prerequisites: Yes*

Creating and Analyzing Surfaces Using ArcGIS Spatial Analyst

One day (8 hours)—\$505

Overview

In this course, you will use ArcGIS Spatial Analyst to model a variety of real-world scenarios to create new data, derive new information from your existing data, analyze complex terrain attributes, and solve problems. You will work with elevation rasters and other data to model surfaces, evaluate results, and create a variety of maps for more informed decision making.

Who Should Attend

GIS analysts and other experienced ArcGIS users who need to perform raster-based spatial modeling and analysis

Goals

After completing this course, you will be able to

- Use different interpolation methods to create surfaces from sample data and evaluate the results.
- Calculate density, slope, and aspect.
- Create hillshade, shaded relief, and contour maps.
- Calculate visibility surfaces and viewsheds.

Prerequisites: Yes*

Introduction to Esri Business Analyst Desktop

Two days (16 hours)—\$1,010

Overview

This course teaches how to integrate geography and business intelligence data to enable better business decision making. You will learn how to use the powerful Business Analyst Desktop tools and extensive data package to analyze site locations, customers, markets, territories, and competitors, helping you uncover patterns, trends, and opportunities in your customer and sales data.

Who Should Attend

Marketing analysts and other business professionals with little or no GIS experience who need to better understand their customers, competitors, and markets

Goals

After completing this course, you will be able to

- Define a study area for analysis to understand how market changes affect existing and proposed site locations.
- Create and manage balanced sales and service territories and regions.
- Create trade areas based on customer and site locations.
- Perform drive-time and market penetration analyses.
- Perform customer profiling and prospecting analyses to generate detailed information about your customers and find others like them.
- Produce reports and maps to present analysis results.

Prerequisites: Yes*

Geoprocessing Raster Data Using ArcGIS Spatial Analyst

One day (8 hours)—\$505

Overview

This course examines techniques for performing raster-based geoprocessing. You will work with ArcGIS Spatial Analyst tools, operators, and functions to analyze raster data and derive actionable knowledge from it, empowering better decisions throughout your organization. The course also covers basic concepts of fuzzy logic, a science-based approach to modeling inaccuracy in attribute data, and you will learn how to apply fuzzy logic to create a suitability model.

Who Should Attend

GIS analysts and other experienced ArcGIS users who perform raster-based spatial analysis for site selection and suitability modeling

Goals

After completing this course, you will be able to

- Construct map algebra expressions to execute Spatial Analyst tools, operators, and functions for GIS analysis.
- Control output cell values using logical and conditional tools.
- Perform cell-based analysis using local, focal, zonal, and global operations.
- Create models to automate and share raster-based geoprocessing workflows.
- Perform fuzzy overlay analysis to account for inaccuracy in attribute data.

Prerequisites: Yes*

Hydrologic and Hydraulic Analyses Using ArcGIS

Five days (40 hours)—\$2,525

Overview

This course presents GIS techniques used for terrain analysis, hydrologic and hydraulic (H&H) characteristics extraction, numerical model input/output, modeling process automation, and result mapping. The course focus is the functionality that GIS provides to H&H modeling, not on performing H&H analyses.

Who Should Attend

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

Goals

After completing this course, you will be able to

- Use triangulated irregular networks (TINs) and Esri Grids to represent terrain surfaces.
- Implement GIS as a spatial and temporal integrator.
- Create hydrologic statistical modeling—National Stream Statistics (NSS) and StreamStats.
- Create hydrologic physical modeling—Hydrologic Modeling System (HMS) and Geospatial Hydrologic Modeling System Extension (GeoHMS).
- Create hydraulic modeling—River Analysis System (RAS) and Geospatial River Analysis System Extension (GeoRAS).
- Perform floodplain mapping.

Prerequisites: Yes*

Introduction to Geoprocessing Scripts Using Python

Three days (24 hours)—\$1,515

Overview

By automating complex or time-consuming processes using scripts, you can streamline GIS workflows and data management. Python is the scripting language included with ArcGIS. This course introduces Python syntax and shows how to use scripts to automate geoprocessing tasks. You will also work with ArcPy, an Esri-developed site package, that integrates Python scripts into ArcGIS Desktop.

Who Should Attend

GIS specialists, analysts, and other experienced ArcGIS Desktop users who want to automate GIS workflows

Goals

After completing this course, you will be able to

- Write Python scripts using proper syntax.
- Use cursors, describe objects, and list objects to manage and update data.
- Understand commonly used ArcPy classes and functions.
- Access geoprocessing tools and environment settings in scripts.
- Debug scripts and write code to handle errors.
- Attach a script to a custom tool.
- Use ArcPy classes and geometry objects to create and update features and perform geoprocessing operations.
- Automate map series production using the ArcPy mapping module.

Prerequisites: Yes*

Esri Technical Certification: Skills Review for ArcGIS Desktop Associate

Two days (16 hours)—\$1,010

Overview

This course helps prepare you to take the ArcGIS Desktop Associate certification exam. You will review, apply, and extend your ArcGIS skills in the areas of GIS data management, editing, visualization, and analysis. Hands-on practice with ArcGIS Desktop software is emphasized.

This course is designed as an exam preparation resource. You are not required to take this course to earn the certification, and completing this course does not guarantee you will pass the exam.

Who Should Attend

Individuals planning to take the ArcGIS Desktop Associate certification exam

Goals

After completing this course, you will have reinforced and improved the skills required to perform the tasks below.

- Create a file geodatabase, add data to it, and define components used to ensure data integrity.
- Choose appropriate source data, layer properties, and layout elements for a given map purpose.
- Create labels and annotation to improve map readability.
- Design a map that will be shared on the web.
- Create and update feature geometry and attributes with the required accuracy.
- Edit data in a versioned environment and resolve editing conflicts.
- Choose appropriate data, tools, and workflows for a given proximity, overlay, and temporal analysis.

Prerequisites: Yes*

Programming ArcGIS Desktop Using Add-ins

Two days (16 hours)—\$1,010

Overview

Add-ins provide a simple and lightweight approach to most common customizations and can be easily shared via e-mail, network shares, and public download. In this course, you will learn best practices for building add-ins to deliver custom ArcGIS functionality and how to integrate ArcObjects to deploy custom GIS processes.

Who Should Attend

Developers and GIS professionals with experience in C#, Visual Basic .NET, and ArcGIS Desktop software

Goals

After completing this course, you will be able to

- Use Visual Studio templates to efficiently create an add-in project.
- Build add-ins to extend the ArcGIS Desktop interface with custom buttons, tools, and dockable windows.
- Integrate desktop ArcObjects with add-in buttons and tools to build a custom solution.
- Choose an appropriate add-in deployment option for your needs.

Prerequisites: Yes*

Esri Technical Certification: Skills Review for ArcGIS Desktop Professional

Two days (16 hours)—\$1,010

Overview

This course helps prepare you to take the ArcGIS Desktop Professional certification exam. In a fast-paced class environment that emphasizes group discussion and hands-on practice, you will review, apply, and extend your skills in the areas of vector and raster data management, data visualization, GIS analysis, modeling and Python scripting, and map production and sharing. Proficiency with the ArcGIS Network Analyst and Spatial Analyst extensions is assumed.

This course is designed as an exam preparation resource. You are not required to take this course to earn the certification, and completing this course does not guarantee you will pass the exam.

Who Should Attend

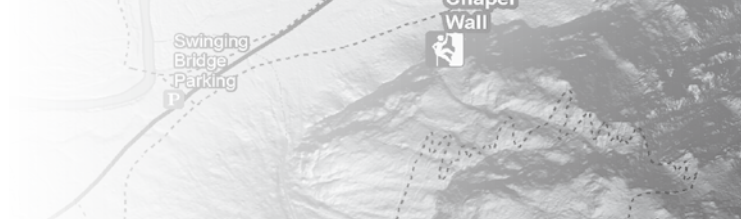
Individuals planning to take the ArcGIS Desktop Professional certification exam

Goals

After completing this course, you will have reinforced and improved the skills required to perform the tasks below.

- Assess data accuracy and quality needs for a given project.
- Troubleshoot coordinate system and data alignment errors.
- Design a schema and add data to a file geodatabase to meet the needs of a given project.
- Choose appropriate data, tools, and settings to perform different types of GIS analysis.
- Create geoprocessing models to automate GIS tasks.
- Apply advanced symbology techniques to improve map readability.
- Share GIS data, maps, and workflows with ArcGIS users and others.

Prerequisites: Yes*



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–Dave Donley, Fire Captain/GIS Manager,
CAL FIRE Riverside County Fire Department, Riverside, CA,
on Esri instructor-led training

. . . In Person or Online

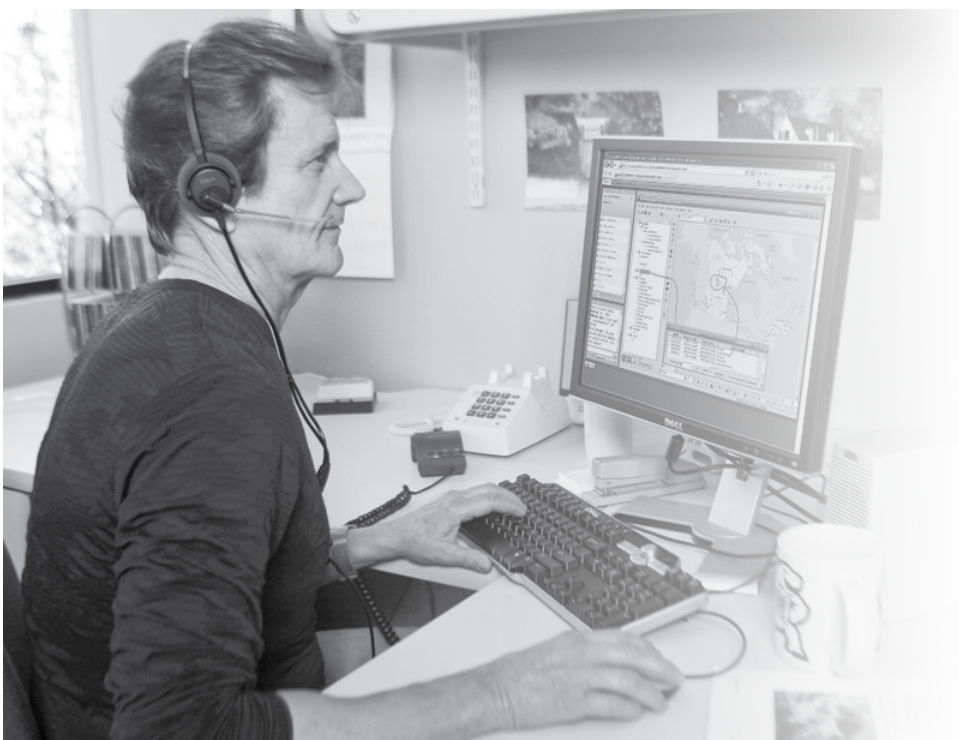


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Building Geodatabases

Three days (24 hours)—\$1,515

Overview

This course teaches essential concepts of the geodatabase and the skills needed to centrally store, manage, and maintain the quality of GIS data. You will learn how to create a geodatabase, migrate existing data to a geodatabase, and edit data stored in a geodatabase. In course exercises, you will create advanced geodatabase elements that maintain spatial relationships between features and automatically locate and fix errors according to rules you set. This course is taught using an ArcInfo license of ArcGIS.

Who Should Attend

GIS data managers, analysts, data technicians, and other experienced ArcGIS users who need to manage data in a geodatabase

Goals

After completing this course, you will be able to

- Create a file geodatabase.
- Migrate shapefiles, CAD files, and Excel spreadsheets to a geodatabase.
- Store and manage raster data in a file geodatabase.
- Create attribute domains, subtypes, topology, and relationship classes to model data and ensure data integrity during editing.
- Create geodatabase annotation to store and reuse map text.
- Create a geometric network to model and analyze a directed flow network such as a utility network.
- Define a geodatabase schema to efficiently model and store data.

Prerequisites: Yes*

Managing Imagery Using ArcGIS

Two days (16 hours)—\$1,010

Overview

ArcGIS 10 offers a complete and integrated solution for managing, serving, and consuming image data. This course introduces the mosaic dataset, a new geodatabase data model for managing and serving raster data, and shows how to perform dynamic image processing using functions. You will learn how to manage image data from multiple sources so that it is accessible and useful to those who consume it.

Who Should Attend

GIS data managers, analysts, and other experienced ArcGIS users who need to efficiently manage and disseminate imagery to users within their organization and on the web

Goals

After completing this course, you will be able to

- Create a mosaic dataset from different types and sources of image data.
- Match and use functions to dynamically process mosaic datasets for a given scenario.
- Efficiently serve dynamic image mosaics and raster data to many applications.
- Perform simple image analysis operations using ArcMap.
- Build and maintain a cache to optimize image service performance.
- Access and use imagery from multiple sources.

Prerequisites: Yes*

Introduction to the Multiuser Geodatabase

Two days (16 hours)—\$1,010

Overview

Organizations using ArcGIS Server can deploy a multiuser ArcSDE geodatabase to provide data access and editing capabilities to many users while ensuring the integrity of their central GIS database. This course prepares you to access and edit data stored in a multiuser geodatabase. You will learn fundamental multiuser geodatabase concepts, about editing options that support different multiuser workflows, and techniques to optimize application performance. Course concepts apply to desktop, workgroup, and enterprise ArcSDE geodatabases.

Who Should Attend

GIS analysts, specialists, data technicians, and others who need to view and edit data stored in a multiuser geodatabase and GIS managers who need to understand the capabilities of a multiuser geodatabase

Goals

After completing this course, you will be able to

- Connect to a multiuser geodatabase.
- Understand how the multiuser editing options support specific workflows.
- Edit data using versioned and nonversioned procedures.
- View and resolve conflicts during versioned editing and synchronize edits across geodatabases.
- Perform two-way geodatabase replication.

Prerequisites: Yes*

System Architecture Design Strategies

Three days (24 hours)—\$1,515

Overview

This course covers GIS infrastructure architecture alternatives and system architecture design strategies that support successful enterprise operations. You will learn comprehensive guidelines for planning and selecting the right system architecture to meet your organization's needs. This course also covers unique performance validation and system capacity planning techniques for enterprise GIS deployments.

Who Should Attend

Senior architecture consultants, GIS technical architects, GIS managers, project managers, software developers, and IT and system administrators who need to understand system architecture and hardware capacity planning criteria or identify performance problems with existing GIS environments

Goals

After completing this course, you will be able to

- Identify and collect user workflow requirements for an enterprise GIS system.
- Describe architecture alternatives for each identified user workflow.
- Recognize factors that impact GIS software performance and scalability.
- Identify network bandwidth requirements.
- Apply best practices for incorporating security throughout system design and deployment.
- Understand how platform technology impacts ArcGIS performance and capacity.
- Develop a target enterprise hardware design to support capacity planning needs.

Prerequisites: Yes*

Working with Geometric Networks for Utilities

One day (8 hours)—\$505

Overview

This course teaches the fundamental concepts of a geometric network and the workflow for creating one. Using utilities data, you will create and edit geometric networks and perform analysis on electric, gas, and water/wastewater networks. These skills will enable you to accurately model your network and help your organization quickly respond to network outages, deliver improved customer service, and manage network assets.

Attendees of this course will receive a complimentary copy of the Esri Press book *Empowering Electric and Gas Utilities with GIS*.

Who Should Attend

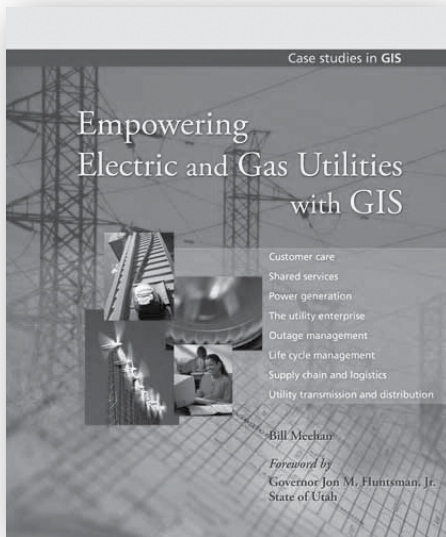
- Spatial data managers and GIS technicians who work in the electric, gas, and water/wastewater industries
- Anyone who needs to model and manage utilities data using geometric networks

Goals

After completing this course, you will be able to

- Define the components of a geometric network.
- Build a geometric network in ArcGIS.
- Create network rules and assign network weights.
- Check network connectivity.
- Perform analysis on geometric networks.
- Edit spatial and attribute data in a geometric network.

Prerequisites: Yes*



Students enrolled in this course will receive a complimentary copy of this Esri Press book.

Arc Hydro: GIS for Water Resources

Three days (24 hours)—\$1,515

Overview

This course presents the Arc Hydro data model and tools and shows how to implement them using a series of real-world examples. You will learn the basic principles of the Arc Hydro data model, how to extend it, and how the Arc Hydro tools manage and use the data model.

Who Should Attend

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

Goals

After completing this course, you will be able to

- Understand and extend the Arc Hydro data model.
- Understand core and advanced Arc Hydro tools functionality.
- Combine Arc Hydro data structure and tools to solve real problems in water resources.
- Extend Arc Hydro tools to create custom functionality.
- Integrate external models into Arc Hydro.

Prerequisites: Yes*

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Managing Editing Workflows in a Multiuser Geodatabase

Three days (24 hours)—\$1,515

Overview

When deploying a multiuser ArcSDE geodatabase, organizations need to design an editing workflow that ensures the integrity of their valuable GIS data and integrates well with existing business workflows. In this course, you will learn about the available multiuser editing environments and options and explore considerations for deciding which editing workflow will best meet the needs of your organization. This course is suitable for those working with desktop, workgroup, and enterprise ArcSDE geodatabases.

Who Should Attend

GIS data managers and experienced ArcGIS users who need to manage their editing environment in a multiuser geodatabase

Goals

After completing this course, you will be able to

- Design and implement various multiuser editing workflows.
- Edit data in both nonversioned and versioned environments.
- Manage multiple geodatabase versions.
- Use geodatabase archiving to track changes to data over time.
- Use geodatabase replication to support data collection, updates, and sharing.
- Create and use multiversioned views.
- Monitor versioned geodatabase performance.
- Implement techniques to maintain performance.

Prerequisites: Yes*

ArcGIS Server Enterprise Configuration and Tuning for Oracle

Two days (16 hours)—\$1,010

Overview

This course prepares Oracle database administrators to maximize ArcSDE technology within an ArcGIS Server enterprise geodatabase to centrally store and manage data, provide robust data security, and deliver multiuser access and editing capabilities. You will become familiar with the ArcSDE architecture and learn how to manage storage settings for spatial data. Techniques for maintaining geodatabase performance in an editing environment and strategies for maintaining and managing an enterprise geodatabase will also be presented.

Who Should Attend

Oracle database administrators who need to install and configure an ArcGIS Server enterprise geodatabase

Goals

After completing this course, you will be able to

- Configure Oracle to support ArcSDE.
- Install, configure, and optimize ArcSDE.
- Create multiple ArcSDE workspaces.
- Load and manage storage for vector and raster data.
- Configure, create, and monitor connections.
- Manage nonversioned and versioned editing workflows.
- Optimize enterprise geodatabase performance.

Prerequisites: Yes*

Data Management in the Multiuser Geodatabase

Three days (24 hours)—\$1,515

Overview

Organizations using ArcGIS Server can deploy a multiuser ArcSDE geodatabase to centrally manage their GIS data, improve its security and integrity, and deliver access and editing capabilities to many users. This course teaches database administrators how to successfully load and manage data in preparation for a multiuser geodatabase implementation. You will learn best practices for designing, interacting with, and maintaining the performance of a multiuser geodatabase and explore multiuser editing workflows and options, including versioning.

Who Should Attend

GIS and database administrators who need to implement a workgroup or enterprise ArcSDE geodatabase

Goals

After completing this course, you will be able to

- Understand the architecture of a multiuser geodatabase.
- Create connections to an ArcSDE geodatabase.
- Set and manage user permissions.
- Create an efficient data storage design to support a multiuser editing workflow.
- Load and manage vector and raster data.
- Apply client optimization techniques.

Prerequisites: Yes*

ArcGIS Server Enterprise Configuration and Tuning for SQL Server

Two days (16 hours)—\$1,010

Overview

This course prepares Microsoft SQL Server database administrators to maximize ArcSDE technology within an ArcGIS Server enterprise geodatabase to centrally store and manage data, provide robust data security, and deliver multiuser access and editing capabilities. You will become familiar with the ArcSDE architecture and learn how to manage storage settings for spatial data. Techniques for maintaining geodatabase performance in an editing environment and strategies for maintaining and managing an enterprise geodatabase will also be presented.

Who Should Attend

Microsoft SQL Server database administrators who need to install and configure an ArcGIS Server enterprise geodatabase

Goals

After completing this course, you will be able to

- Configure SQL Server to support ArcSDE.
- Install, configure, and optimize ArcSDE.
- Load and manage vector and raster data.
- Configure, create, and monitor connections.
- Manage nonversioned and versioned editing workflows.
- Perform data backup and recovery tasks.
- Upgrade a workgroup geodatabase to an enterprise geodatabase.

Prerequisites: Yes*

Introduction to ArcGIS Server

Two days (16 hours)—\$1,010

Overview

In this course, you will acquire the skills needed to share GIS content on the web or across the enterprise. You will learn a workflow to publish maps, imagery, geoprocessing models, and feature templates for use in web applications that support visualization, analysis, and editing of GIS resources.

Who Should Attend

- GIS analysts, specialists, and other experienced ArcGIS Desktop users who want to share their GIS content in a web mapping application
- Developers who need to understand ArcGIS Server functionality to incorporate GIS services into custom applications

Goals

After completing this course, you will be able to

- Author and publish dynamic and cached map services.
- Design and generate a map cache to maximize map service performance.
- Configure a geoprocessing model and publish it as a geoprocessing service.
- Publish an image service from a mosaic dataset to visualize change over time.
- Publish a feature service to enable editing in a web application.
- Extend a web mapping application using sample code and the ArcGIS API for JavaScript.

Prerequisites: Yes*

ArcGIS Server: Web Administration Using the Microsoft .NET Framework

Three days (24 hours)—\$1,515

Overview

This course teaches how to successfully set up and maintain an ArcGIS Server system that enables GIS content sharing across the enterprise or on the web. You will learn the ArcGIS Server architecture and recommended workflows for managing GIS services, applications, data, users, and servers. Techniques and best practices to ensure system performance and security are emphasized.

Who Should Attend

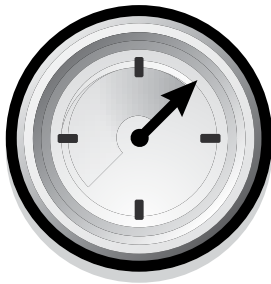
IT administrators, system administrators, GIS administrators, and others who install, manage, or support an ArcGIS Server system

Goals

After completing this course, you will be able to

- Apply best practices to install and configure a scalable ArcGIS Server system.
- Manage access and permissions for GIS services and resources.
- Create an ArcGIS Server search service to efficiently locate GIS resources.
- Configure and build a map service cache to optimize performance.
- Tune services and the GIS server for optimal performance.
- Deploy geoprocessing services to support server-based GIS analysis.
- Configure ArcSDE to support web editing and versioned data replication via geodata services.
- Implement security for web applications and services.

Prerequisites: Yes*



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Building Web Applications Using ArcGIS API for Flex Two days (16 hours)—\$1,010

Overview

Using ArcGIS Application Program Interface (API) for Flex, you can build high-performing, engaging web applications that incorporate ArcGIS Server mapping, geocoding, and geoprocessing services. This course teaches how to use the ArcGIS API for Flex and the Adobe Flex platform to efficiently develop rich applications that meet the needs of their intended audience.

Who Should Attend

Web developers who want to create rich Flex-based applications that include GIS web services

Goals

After completing this course, you will be able to

- Develop, test, and deploy an application using ArcGIS API for Flex and Flash Builder.
- Incorporate ArcGIS Server services that allow end users to query, visualize, and edit data.
- Include network analysis and time-aware data in an application.
- Enhance map features with different symbols.
- Display query results as data grids.
- Build a well-designed application interface for end users.

Prerequisites: Yes*

Building Web Applications Using ArcGIS API for Microsoft Silverlight/WPF Two days (16 hours)—\$1,010

Overview

Using ArcGIS API for Microsoft Silverlight/Windows Presentation Foundation (WPF), you can build highly interactive, visually rich web and desktop applications that incorporate ArcGIS Server mapping, geocoding, and geoprocessing services. This course teaches how to use ArcGIS API for Microsoft Silverlight/WPF and the Silverlight platform to develop high-performing web applications that deliver GIS content and functionality to end users.

Who Should Attend

Web developers who want to create rich Silverlight applications that include GIS web services

Goals

After completing this course, you will be able to

- Develop an application using ArcGIS API for Microsoft Silverlight/WPF and the Silverlight platform.
- Use sample code, sample services, and templates to efficiently build new applications and extend existing applications.
- Incorporate ArcGIS Server services that allow end users to visualize, query, and edit data.
- Enhance the display of map features using symbols, MapTips, and renderers.
- Display task results using graphics.
- Incorporate GIS operations such as geocoding, geoprocessing, editing, and routing.

Prerequisites: Yes*

Building Web Applications Using ArcGIS API for JavaScript Two days (16 hours)—\$1,010

Overview

This course teaches how to leverage ArcGIS API for JavaScript to efficiently develop lightweight applications that meet the needs of their intended audience. You will learn about the resources available in ArcGIS API for JavaScript and how to incorporate basemaps and other ArcGIS Online resources to enhance your web applications.

Who Should Attend

Web developers who want to create JavaScript-based applications that include GIS services and functionality

Goals

After completing this course, you will be able to

- Develop, test, and deploy an application using ArcGIS API for JavaScript.
- Incorporate ArcGIS Server services that allow end users to query, visualize, and edit GIS data.
- Include time-aware data in an application.
- Display map features with different symbols.
- Display query results within a data grid.
- Apply best practices to ensure high performance and proper communication between the client application and web server.

Prerequisites: Yes*

Creating Effective Web Applications Using ArcGIS Server Two days (16 hours)—\$1,010

Overview

This course teaches basic design principles for creating web mapping applications that are attractive, fast, and easy to use by their intended audience. In course exercises, you will work with lightweight ArcGIS Web Mapping APIs to create a focused application that utilizes internal and external ArcGIS Server web services.

Who Should Attend

GIS analysts and others who want to create web mapping applications to extend the use of GIS content to non-GIS departments within an organization and to the general public via the Internet (No web development experience is required.)

Goals

After completing this course, you will be able to

- Choose an application development environment that meets your needs.
- Author high-performing basemap and operational layers for a map service.
- Design an application for efficient querying and editing.
- Build an application that includes geoprocessing functionality.
- Configure Esri templates and out-of-the-box viewers to quickly build a web application.

Prerequisites: Yes*

Implementing Esri Geoportal Server

Two days (16 hours)—\$1,010

Overview

Esri Geoportal Server is a free and open source product for implementing local, regional, national, and global spatial data infrastructure (SDI) portals. It provides the necessary elements of a successful geoportal through its framework, discovery, service preview, administration, publishing, and resource synchronization modules. This course teaches how to install, customize, and use a geoportal using the open source Esri Geoportal Server.

Who Should Attend

- Technical staff from an Esri partner, distributor, or distributor business partner that will implement Esri Geoportal Server for end users
- GIS data managers, analysts, specialists, data technicians, database administrators, and others who need manage geospatial resources

Goals

After completing this course, you will be able to

- Understand how Esri Geoportal Server supports different metadata standards.
- Integrate a geoportal into an enterprise GIS architecture.
- Implement a Java/JavaServer Pages (JSP)-based web catalog geoportal.
- Understand how to use client tools to search other geoportals.
- Know how to contribute to the Esri Geoportal Server open source project.

Prerequisites: Yes*

Implementing Tracking Server

Four days (32 hours)—\$2,020

Overview

Tracking Server is used to collect and send real-time data from many data sources and formats to web and desktop clients including ArcGIS Tracking Analyst. In this course, you will learn to receive, send, and display real-time messages on multiple clients; log data into geodatabases using Tracking Server Feature Logger; create your own tracking website using tools available with Tracking Server; create and apply actions to data from real-time sources; and develop customized connections for the real-time message server.

Who Should Attend

Developers who have significant experience with ArcObjects, C++, Flex, and Component Object Model (COM)

Goals

After completing this course, you will be able to

- Install and configure Tracking Server.
- Administer Tracking Server.
- Build and deploy a tracking viewer website.
- Create a customized real-time web client.
- Use Tracking Analyst to receive real-time data from Tracking Server.
- Create a Tracking Server data link.

Prerequisites: Yes*

Authoring and Serving ArcGIS Mobile Projects

Two days (16 hours)—\$1,010

Overview

This course teaches a recommended workflow to successfully create a ready-to-deploy ArcGIS Mobile project for the Windows Mobile platform. Beginning at the planning phase and working through the project deployment process, you will learn how to optimize existing data, maps, and workflows to support GIS data inspection and collection in the field. In course exercises, you will work with a mobile device emulator to author, test, and deploy a mobile project.

Who Should Attend

- GIS analysts and others who want to deploy mobile GIS projects using ready-to-deploy ArcGIS Mobile functionality
- Developers who want to understand ready-to-deploy ArcGIS Mobile functionality

Goals

After completing this course, you will be able to

- Plan a mobile project for use within an enterprise system.
- Choose appropriate data management and transaction models to support real-time field data collection.
- Create mobile map services that are optimized for use in the field.
- Assess security needs and options for a mobile project.
- Quickly configure and deploy a mobile project.
- Synchronize data collected in the field with a geodatabase optimized for your mobile project.
- Update and maintain a mobile project over time.

Prerequisites: Yes*

Esri Technical Certification

The Esri Technical Certification Program gives you the opportunity to distinguish yourself by achieving a technical benchmark in your area of expertise, whether you're a GIS professional using ArcGIS software, a developer of GIS applications, or a GIS enterprise systems administrator.

Promoting GIS Success

The Esri Technical Certification Program is designed to create a community of qualified individuals who are proficient in best practices using Esri software. Establishing an industry-recognized benchmark will

- Improve success with GIS by creating a more qualified workforce.
- Help organizations maximize their investment in Esri technology by employing a workforce certified in using best practices.
- Assist hiring organizations in assessing candidate skills and abilities.
- Aid in creating departmental and organizational staff development plans.

Taking an Examination

Esri Technical Certification examinations are offered at more than 5,000 locations around the world through Pearson VUE, Esri's global testing partner. The computer-based exams consist of 90–95 multiple-choice questions and take approximately two hours to complete. Exams are currently offered in English only.

Preparing for Your Exam

The skills and knowledge you've acquired on the job are the best preparation for your certification exam. You should also review the Candidate Qualifications and Skills Measured sections on the Esri Technical Certification website. From that, you can determine if your skills align with the listed skills and qualifications. You can also review Training Resources and identify classes that may help you prepare for the exam. In addition, you can visit the ArcGIS Resource Center at resources.esri.com or view product web pages, demos, and PowerPoint® presentations at esri.com. Esri has also introduced two new Skills Review courses to help you prepare for the desktop certification exams:

- Esri Technical Certification: Skills Review for ArcGIS Desktop Associate (see page 15)
- Esri Technical Certification: Skills Review for ArcGIS Desktop Professional (see page 15)

For detailed information about the program and each certification, visit esri.com/certification.

To register for an exam, visit www.pearsonvue.com/esri.

Esri Technical Certification Program	
Desktop	ArcGIS Desktop Associate Professional
Developer	ArcGIS Desktop Developer Associate Professional*
	Web Application Developer Associate Professional*
	Mobile Developer Associate* Professional*
Enterprise	Enterprise Geodatabase Management Associate Professional*
	Enterprise System Design Associate Professional*
	Enterprise Administration Associate

* Available late 2011 and 2012

Instructor-Led Training

1. Select Your Course

Go to esri.com/coursecatalog to view schedules for instructor-led courses taught in the traditional classroom and online. For more information on course availability or for advice, please contact an Esri training consultant at GIStraining@esri.com or 1-800-447-9778, extension 1-5757.

2. 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.

- **Esri Training Website**—Once you've selected your course, enter the number of seats you'll need, or students who will attend, and click Register. You will then be asked to complete an online registration form and submit payment information through our secure online system.
- **Phone**—Contact an Esri training consultant at 1-800-447-9778, extension 1-4518, or by e-mail at GIStraining@esri.com.
- **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 2 business days. Phone, mail, and fax registration applications will be acknowledged via e-mail. Registrations will not be confirmed until payment is received. Classes are confirmed a minimum of 10 business days prior to the scheduled start date. Please keep this in mind when purchasing nonrefundable airline tickets.

3. Payment

To complete your registration, proof of payment is required. Payment can be made by check (payable to Esri), credit card, preexisting contract, federal government training request, or purchase order. Cash is not accepted. Purchase orders for less than \$800 will be accepted only from United States federal, state, and local government agencies; United States educational institutions; and Fortune 500 companies. Mail payment and a copy of your registration form to Esri, File #54630, Los Angeles, CA 90074-4630.

Transfers and Substitutions

A student may transfer to another class up to two times without charge, after which an administrative fee will be assessed for each transfer. Student substitutions (filling a student's place with another person from the same organization) are allowed under certain conditions. Please refer to Training Terms and Conditions found at esri.com/legal.

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 e-mail 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.

Course Materials

All course materials are provided at the training site. For online courses, Esri hosts software that is used in the course, and course materials and data are downloaded as part of the class.

Self-Paced Training

1. Select Your Course

Go to esri.com/coursecatalog to view available web courses.

2. Register

Whether you selected a free or paid course, you'll need an Esri Global Account, which you can create from the registration page. For paid courses, you will be offered the opportunity to pay with a credit card using our secure payment system. You'll immediately receive a course access code via e-mail. For free courses, you can go directly to the course.

Payment Options

You can also register for a web course via telephone and pay using credit card, annual user license, federal training request, or purchase order.*

Call 1-800-447-9778 Monday–Friday between 6:00 a.m. and 5:00 p.m. Pacific time. A course code will be e-mailed to you after the payment process is complete—approximately two to three business days.

3. Take Your Course

On the Esri Training website, you can access your course from your My Training page and get started right away. You can start, stop, and return to the course when it's convenient for you.

Annual User License Orders

Esri Virtual Campus annual user licenses allow you to prepurchase self-paced web courses at a reduced price. For more information or to verify credits on your user license, call 1-800-447-9778 or visit esri.com/training/license.

Outside the United States

Order online as described above or contact your local Esri distributor for local training options. Visit esri.com/distributors to find the Esri distributor nearest you.

*Purchase orders for less than \$800 are accepted only from United States federal, state, and local government agencies; United States educational institutions; and Fortune 500 companies.

Esri's Certified Training Program and Authorized Training Program

Instructor-led training is also available through the Certified Training Program (CTP) and the Authorized Training Program (ATP).

CTP trainers hold both an Esri Technical Certification and a CompTIA CTT+ certification and offer limited courses in ArcGIS 10. Visit esri.com/ctp to find CTP trainers near you.

Authorized Training Program (ATP) instructors must meet authorization requirements for specific courses for ArcGIS 9.3 and previous versions. Visit esri.com/atp to find ATP instructors near you.



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.

Find the Right Course

We recognize that it can be difficult to determine which training courses will best meet your needs. Esri training consultants understand the range of Esri training solutions and are available to recommend appropriate training based on job roles and responsibilities. This service is free of charge. A training consultant can also assist with creating a GIS training plan for your organization. A training plan is designed to help you or your department develop the organizational skills and technical knowledge needed to maximize your investment in Esri software.

To talk to the Esri training consultant in your area, call 1-800-447-9778, extension 1-5757, or send an e-mail to GIstraining@esri.com.

The Esri Training website offers multiple ways to search for and locate the right course for you. They're all quick and easy and provide a full list of classes that meet your search criteria. Visit esri.com/coursecatalog to get started. You can

- Search based on the Esri software or technology you use.
- Find courses by date, title, location, or class format.
- Use our Course Recommendations tool—Answer some basic questions, and we'll present you with a filtered list of courses by GIS topic, functional task, or technology.



GIS Certification Institute

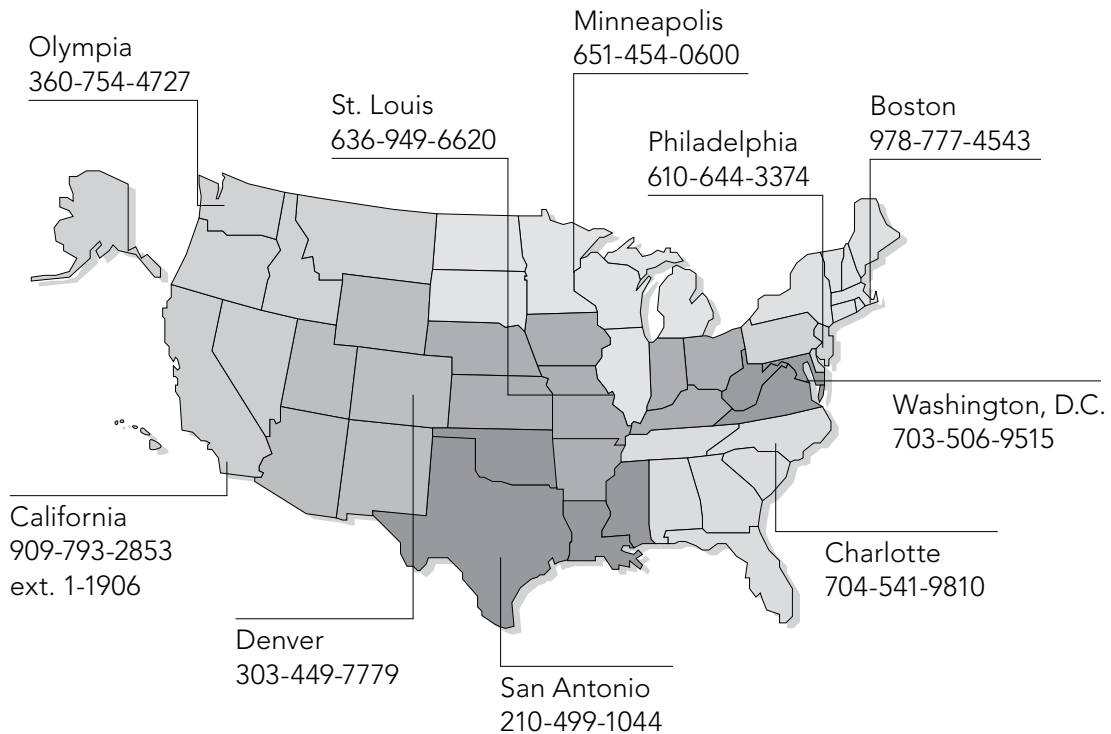
Esri instructor-led and self-study courses qualify for educational achievement points awarded by the GIS Certification Institute (GISCI). After completing an Esri training course, you may submit your course completion certificate to GISCI for verification.

For more information about GISCI, visit www.gisci.org.

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Esri offers training at the following Esri regional offices. For more information, visit esri.com/trainingmaps or call 1-800-447-9778, extension 1-5757.

Esri Regional Offices



Find Out More about Esri Training

For the latest class schedules and detailed course descriptions and to register, visit esri.com/coursecatalog.

My Esri News keeps you connected with GIS users and events in your area. Sign up today at esri.com/myesrinews.

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Esri Training

Is your GIS staff equipped for project success?

What resources are available to meet specific training goals?

Need to stretch your training budget?

Do you have a plan of action to achieve the full business benefits of GIS?

A training plan is a tool to help you ensure that staff skills are leading edge, and it can also help you prepare for technology implementations, simplify budget processes, and clarify the critical contribution of GIS in your organization. An Esri training consultant is available to help you create a plan that reflects your organization's goals and needs.

To talk with an Esri training consultant, call 1-800-447-9778, extension 1-5757, or send an e-mail to GIStraining@esri.com.

