

ESRI COURSE CATALOG





Dear Colleague:

This year, Esri is bringing 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—the desktop, enterprise, mobile, Web, and cloud.

But we're not just bringing you more functionality. We've 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're offering 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,

Jack Dangermond

President

Take Instructor-Led Training in ArcGIS 9.3 or ArcGIS 10

To ensure that Esri customers have access to training they need for the ArcGIS release they're using, we will be transitioning instructor-led course content from ArcGIS 9.3 to ArcGIS 10 throughout 2010 and into 2011. The class schedule on the Esri Training Web site will specify which release will be used in a given class.

Find Out More about Esri Training

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

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

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

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, allowing staff 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 fundamental GIS technology 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 www.esri.com/trainingnews.

	Training Format	Description	Benefits
	Traditional Classroom Course	Presentations, demonstrations, group activities, and hands-on exercises are presented in a classroom at an Esri learning center or a client site.	Instructor available for questions and guidance throughout the class Interaction with other students Focused time to learn in a classroom setting
Instructor-Led	Virtual Classroom Course	Presentations, demonstrations, group activities, and hands-on exercises are presented in an interactive classroom on the Internet. The instructor and students communicate using the telephone and integrated chat tool.	Instructor available for questions and guidance throughout the class Interaction with other students Convenience—students able to attend from their desktop No travel required
	Instructor-Led Course Offered by Professional Services	Presentations, demonstrations, and hands-on exercises are de- livered by Esri Professional Services consulting staff who design courses for specific industry solutions and Esri solution products.	Instructors with expertise in industry-specific projects Can accommodate customized solutions for specific customer requests
	Web Course	Concepts and hands-on exercises are completed by students over the Internet at the students' own pace. Some courses require a broadband connection. Access to the software needed for course exercises is required.	Available 24/7 Rich, in-depth training Independent study
Self-Paced	Training Seminar	A free, hour-long recorded presentation is delivered by an Esri subject matter expert over the Internet. A broadband connection is required.	No cost Available 24/7 Focused technical training
	Instructional Series Podcast	A free, short audio recording on a specific topic is delivered by an Esri subject matter expert. Podcasts can be listened to online or downloaded.	No costAvailable 24/7Short, focused training

Esri Training Delivery Options

Esri instructor-led courses are taught 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.

Client-Site and Private Class Options

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.

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 is another cost-effective training solution.

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.

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.

Finding the Right Training

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 free of charge to recommend appropriate training based on job roles and responsibilities. A training consultant can also assist with creating a GIS training plan for your organization. A training plan is designed to help you 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.

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

New Training Format Will Improve User Success

With the introduction of ArcGIS® 10, Esri has made a substantial investment in upgrading course design and instructor skills. The new 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 now includes

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

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.

High-Caliber Instructor Skills

All Esri instructors have completed CompTIA CTT+ certification. CompTIA is the international trade association that sets standards for information technology (IT) professionals and companies including instructors. CompTIA CTT+ is an international certification that covers core instructor skills, including preparation, presentation, communication, facilitation, and evaluation, in both a traditional and virtual classroom environment.

With the new course design, Esri instructors have the flexibility to adapt how they present course material based on the 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 Virtual Classrooms

Interactive learning is a proven approach that works well in both traditional, brick-and-mortar and virtual classrooms.

Esri's Virtual Classroom allows 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.

Getting Started with ArcGIS

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 the ArcGIS API for JavaScript™, Building Web Applications Using the ArcGIS API for Flex™, or Building Web Applications Using the 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 www.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)—\$980

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)—\$1,470

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)—\$980

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

^{*}For more information, including up-to-date course descriptions, prerequisites, and schedules, visit www.esri.com/coursecatalog.

Desktop GIS

Introduction to ArcGIS for Geospatial Intelligence and Law Enforcement

Three days (24 hours)—\$1,470

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 should take this course in lieu of *ArcGIS Desktop II: Tools and Functionality*.

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, heads-up digitizing, or other methods.
- 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: Proficiency with Windows-based software for file management

Introduction to ArcGIS Desktop for Mining Geoscience Three days (24 hours)—\$1,470

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*

Creating and Publishing Maps with ArcGIS Three days (24 hours)—\$1,470

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*

Cartography with Esri Production Mapping Two days (16 hours)—\$980

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.

Introduction to Esri Aeronautical Solution Three days (24 hours)—\$1,470

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*

Introduction to Esri Defense Mapping Five days (40 hours)—\$2,450

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*

Configuring Esri Aeronautical Solution Two days (16 hours)—\$980

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 Nautical Solution

Five days (40 hours)—\$2,450

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.

^{*}For more information, including up-to-date course descriptions, prerequisites, and schedules, visit www.esri.com/coursecatalog.

Desktop GIS

Advanced Nautical Chart Production Three days (24 hours)—\$1,470

Overview

Esri 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 Esri Nautical Solution.

Who Should Attend

Individuals familiar with nautical charts who will be involved in producing and maintaining nautical charts using Esri 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 Production and Editing Techniques Three days (24 hours)—\$1,470

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.
- Create metadata to document datasets.

Prerequisites: Yes*

Data Editing with Esri Production Mapping Three days (24 hours)—\$1,470

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*

Quality Control Using ArcGIS Data Reviewer Two days (16 hours)—\$980

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.

^{*}For more information, including up-to-date course descriptions, prerequisites, and schedules, visit www.esri.com/coursecatalog.

Working with CAD Data in ArcGIS Desktop One day (8 hours)—\$490

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
- 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 a CAD feature class so that it displays correctly 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.

Prerequisites: Yes*

Working with ArcGIS Spatial Analyst for Geospatial Intelligence Four days (32 hours)—\$1,960

In this course, you will 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 need to support the planning and management of responses to potential and actual threat events.

Goals

After completing this course, you will be able to

- Create and prepare raster data for use in spatial models and analyses.
- Create distance models to find the most efficient path between locations
- Create suitability models to identify optimal locations for resource deployment.
- Create general threat rating and vulnerability maps.
- Create a spatial model to analyze a potential threat event.

Prerequisites: Yes*

Performing Analysis with ArcGIS Desktop Three days (24 hours)—\$1,470

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

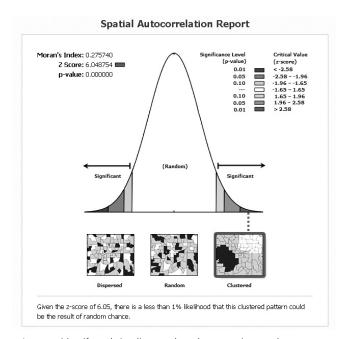
 \mbox{GIS} analysts, specialists, and other experienced ArcGIS Desktop users who manage or conduct \mbox{GIS} analysis projects

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*



Learn to identify and visualize trends and patterns in your data.

^{*}For more information, including up-to-date course descriptions, prerequisites, and schedules, visit **www.esri.com/coursecatalog**.

Desktop GIS

Working with 3D GIS Using ArcGIS Two days (16 hours)—\$980

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 shadow effect of a proposed building on surrounding structures.

Creating and Analyzing Surfaces Using ArcGIS Spatial Analyst One day (8 hours)—\$490

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*

Geoprocessing Raster Data Using ArcGIS Spatial Analyst One day (8 hours)—\$490

Overview

This course examines suitability modeling techniques using raster data. You will learn how to classify, weight, and combine data to identify sites suitable for a specific use. In course exercises, you will work with ModelBuilder" to implement a suitability modeling workflow.

Who Should Attend

- GIS analysts and other experienced ArcGIS users who perform rasterbased spatial modeling and analysis
- Those who need to conduct site selection analyses such as finding suitable locations for schools, businesses, evacuation shelters, habitats, or housing developments

Goals

After completing this course, you will be able to

- Understand various types of models.
- Choose necessary data and tools for analysis.
- Create an appropriate suitability scale.
- Reclassify spatial data using various classification methods.
- Create binary and weighted suitability models.
- Model a suitability workflow within ModelBuilder.
- Document a model for reusability and sharing.

^{*}For more information, including up-to-date course descriptions, prerequisites, and schedules, visit www.esri.com/coursecatalog.



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-Pete Frye, GIS Technician, City of Richardson, Texas

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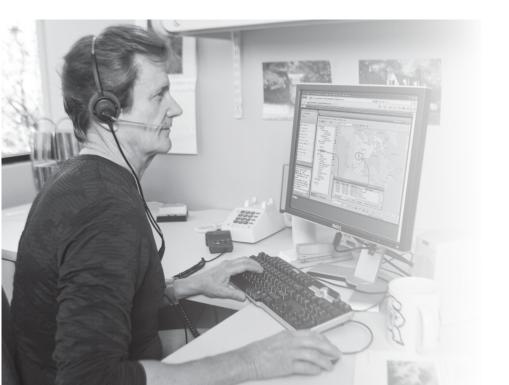
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What's Required

You probably already have everything in your office that you'll need. We host the Esri software used in the course to ensure that everyone is working from the same version.

- Computer running a Windows® XP, Windows Vista®, or Windows 7 operating system
- Broadband Internet connection
- Web browser: Internet Explorer® 6.0 (or higher) or Mozilla® Firefox® 3.x
- Telephone to dial a toll-free number (headset or speakerphone is recommended)
- Adobe[®] Flash[®] Player plug-in



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Introduction to Esri Business Analyst Two days (16 hours)—\$980

Overview

This course teaches fundamental Esri Business Analyst[™] concepts and introduces its powerful analysis tools. You will become familiar with the Esri Business Analyst workflow as you explore the extensive library of data included with the software. In course exercises, you will get hands-on practice with many types of business analyses.

Who Should Attend

Individuals with or without GIS experience who want to take advantage of Esri Business Analyst tools and data to improve business decision making

Goals

After completing this course, you will be able to

- Create a study area for analysis.
- Create and manage balanced sales and service territories and regions.
- Create trade areas based on customer and store locations.
- · Perform drive-time and market penetration analyses.
- Perform customer segmentation analysis to generate detailed information about your customers.
- Create reports and maps to present analysis results.

Prerequisites: Yes*

Introduction to Geoprocessing Scripts Using Python Three days (24 hours)—\$1,470

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 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.
- Automate map series production using the ArcPy mapping module.

Prerequisites: Yes*

Hydrologic and Hydraulic Analyses Using ArcGIS Five days (40 hours)—\$2,450

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*

Programming ArcGIS Desktop Using Add-ins

Two days (16 hours)—\$980

Overview

The course teaches how to customize and extend ArcGIS Desktop with a focus on the new add-in framework for ArcGIS 10. 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. You will learn best practices for building add-ins to deliver custom functionality and how to integrate ArcObjects™ and Python scripts to deploy custom GIS processes.

Who Should Attend

Developers with experience in C++ and Python who want to implement custom ArcGIS Desktop functionality using add-ins, extend the ArcGIS Desktop interface, and build custom processes

Goals

After completing this course, you will be able to

- Understand fundamental Component Object Model (COM) and Python programming concepts.
- Build add-ins to extend the ArcGIS Desktop interface.
- Integrate desktop ArcObjects with add-in buttons and tools.
- Integrate existing Python script tools with add-ins.

^{*}For more information, including up-to-date course descriptions, prerequisites, and schedules, visit www.esri.com/coursecatalog.

Geodatabase

Building Geodatabases Three days (24 hours)—\$1,470

Overview

This course covers essential concepts of the geodatabase, which allows you to centrally store, manage, and maintain the quality of GIS data. You will learn how to create a geodatabase, add existing data to a geodatabase, and edit data stored in a geodatabase. In course exercises, you will create advanced geodatabase elements that maintain feature integrity 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

- Migrate shapefiles, CAD files, coverages, and Excel spreadsheets to a file geodatabase.
- · Store and manage raster data in a file geodatabase.
- Create attribute domains, subtypes, topology, and relationship classes to model feature behaviors.
- 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 data.

Prerequisites: Yes*

Managing Imagery Using ArcGIS Two days (16 hours)—\$980

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 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.
- · Access and use imagery from multiple sources.
- Build and maintain a cache to optimize image service performance.

Prerequisites: Yes*

Introduction to the Multiuser Geodatabase Two days (16 hours)—\$980

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 load, access, and edit data stored in a multiuser geodatabase. You will learn fundamental multiuser geodatabase concepts and about editing options that support different multiuser workflows. 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
- 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.
- Load vector and raster data into a multiuser geodatabase and migrate data between geodatabases.
- Understand multiuser editing options.
- Edit data using versioned and nonversioned procedures.
- Resolve conflicts during versioned editing and synchronize edits.
- Perform disconnected editing using geodatabase replication.

Prerequisites: Yes*

System Architecture Design Strategies

Three days (24 hours)—\$1,470

Overview

This course introduces GIS infrastructure architecture alternatives and system architecture design strategies that support successful enterprise operations. You will learn comprehensive guidelines for planning the right system architecture to support your deployment needs.

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

- Describe architecture alternatives for identified user workflows in an enterprise GIS system.
- Understand factors that impact GIS performance and scalability.
- Describe 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.

^{*}For more information, including up-to-date course descriptions, prerequisites, and schedules, visit www.esri.com/coursecatalog.

Working with Geometric Networks for Utilities One day (8 hours)—\$490

Overview

This course teaches the fundamental concepts and components 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

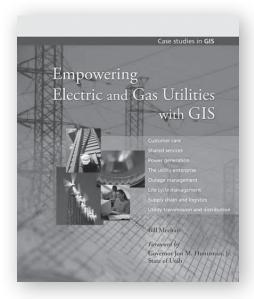
- Spatial data managers and GIS technicians who work in the electric, gas, and water/wastewater industries
- Anyone who needs to model and manage utilities data using geometric networks

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

Arc Hydro: GIS for Water Resources Three days (24 hours)—\$1,470

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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^{*}For more information, including up-to-date course descriptions, prerequisites, and schedules, visit www.esri.com/coursecatalog.

Geodatabase

Managing Editing Workflows in a Multiuser Geodatabase Three days (24 hours)—\$1,470

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)—\$980

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

Experienced Oracle database administrators who need to install and configure an ArcSDE 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.
- · Customize storage for vector and raster data.
- Configure, create, and monitor connections.
- Implement nonversioned and versioned editing workflows.
- Optimize enterprise geodatabase performance.

Prerequisites: Yes*

Data Management in the Multiuser Geodatabase Three days (24 hours)—\$1,470

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. While this course focuses primarily on the enterprise ArcSDE geodatabase, course concepts apply to workgroup geodatabases as well.

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)—\$980

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

Experienced Microsoft SQL Server database administrators who need to install and configure an ArcSDE multiuser geodatabase

Goals

After completing this course, you will be able to

- Configure SQL Server to support ArcSDE.
- Install, configure, and optimize ArcSDE.
- Create multiple ArcSDE workspaces.
- Customize storage for vector and raster data.
- Configure, create, and monitor connections.
- Implement nonversioned and versioned editing workflows.
- Optimize enterprise geodatabase performance.

^{*}For more information, including up-to-date course descriptions, prerequisites, and schedules, visit www.esri.com/coursecatalog.

Introduction to ArcGIS Server Two days (16 hours)—\$980

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 in order 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 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.
- 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)—\$1,470

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 the best 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 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 editing and versioned data replication over the Web.
- Implement security for Web applications and services.

Prerequisites: Yes*



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^{*}For more information, including up-to-date course descriptions, prerequisites, and schedules, visit www.esri.com/coursecatalog.

Server GIS

Building Web Applications Using the ArcGIS API for Flex Two days (16 hours)—\$980

Overview

Using the ArcGIS Application Program Interface (API) for Flex, you can build interactive, rich Web and desktop applications that incorporate ArcGIS Server mapping, geocoding, and geoprocessing services. This course teaches how to use the ArcGIS API for Flex to develop high-performing Web applications that deliver GIS content and functionality to end users.

Who Should Attend

Experienced Web developers who want to create rich Flex applications that include GIS Web services

Goals

After completing this course, you will be able to

- Develop, test, and deploy an application using the ArcGIS API for Flex.
- Use sample code and templates to efficiently build and extend applications.
- Incorporate ArcGIS Server services that allow end users to visualize, query, and edit data.
- Enhance map feature display using symbols, MapTips, and renderers.
- Incorporate geocoding, geoprocessing, and routing tasks.
- Display task results using graphics and behaviors.

Prerequisites: Yes*

Building Web Applications Using the ArcGIS API for JavaScript Two days (16 hours)—\$980 (available December 2010)

Overview

This course teaches how to leverage the ArcGIS API for JavaScript to efficiently develop rich applications that incorporate ArcGIS Server mapping, geocoding, and geoprocessing services. You will learn about the components available in the ArcGIS API for JavaScript, how to write code for a JavaScript-based application, and how to incorporate resources from ArcGIS*Online to enhance your Web applications.

Who Should Attend

Experienced Web developers who want to create applications that include GIS services and functionality using the ArcGIS API for JavaScript

Goals

After completing this course, you will be able to

- Develop, test, and deploy an application using the ArcGIS API for JavaScript.
- Incorporate ArcGIS Server services that allow end users to query, visualize, and edit data.
- Display map features with different symbols.
- Display query results as data grids and charts.
- · Create custom widgets.
- Ensure proper communication between client applications and Web servers.

Prerequisites: Yes*

Building Web Applications Using the ArcGIS API for Microsoft Silverlight/WPF

Two days (16 hours)—\$980

Overview

Using the 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 the 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

Experienced 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, test, and deploy an application using the 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 and behaviors.
- Incorporate GIS operations such as geocoding, geoprocessing, editing, and routing.

Prerequisites: Yes*

Creating Effective Web Applications Using ArcGIS Server Two days (16 hours)—\$980

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 the 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*

*For more information, including up-to-date course descriptions, prerequisites, and schedules, visit www.esri.com/coursecatalog.

Developing Applications with ArcGIS Server Using the Java Platform Three days (24 hours)—\$1,470

Overview

This course teaches how to integrate GIS capabilities into your Web applications, enhancing their value to end users and increasing your value as a developer. You will learn standard guidelines for developing custom ArcGIS Server Web Application Developer Framework (ADF™) applications, about the available libraries and application programming interfaces (APIs), and how to work with Web ADF controls and data sources. You will develop custom applications that incorporate out-of-the-box tasks and build custom Web tasks to deliver advanced functionality.

Who Should Attend

Experienced Java[™] programmers who have Internet development experience using Java 2 Enterprise Edition (J2EE) and JavaServer[™] Pages (JSP) technology

Goals

After completing this course, you will be able to

- Use the ArcGIS Server Web ADF to integrate GIS capabilities into your JavaServer Faces (JSF)-based Web applications.
- Develop custom Web applications using the Java Web ADF controls.
- Programmatically implement out-of-the-box tasks in applications.
- Develop custom commands and tools using the task framework.
- Apply development rules for working with the ArcGIS Server Simple Object Access Protocol (SOAP) and ArcObjects APIs.
- Extend the capabilities of ArcGIS Server with server object extensions and utility objects.

Prerequisites: Yes*

Implementing ArcGIS Server Geoportal Extension Two days (16 hours)—\$980

Overview

The ArcGIS Server Geoportal extension (formerly GIS Portal Toolkit) is a combined technology and services solution 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 ArcGIS Server Geoportal extension.

Who Should Attend

- Technical staff from an Esri business partner, distributor, or distributor business partner who will implement the ArcGIS Server Geoportal extension for end users (After completing the course, Esri business partners, distributors, and distributor business partners may offer implementation services for the ArcGIS Server Geoportal extension.)
- Technical staff from large commercial organizations with in-depth ArcSDE and ArcIMS® experience

Goals

After completing this course, you will be able to

- Understand how the ArcGIS Server Geoportal extension 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.

Prerequisites: Yes*

Developing Applications with ArcGIS Server Using the Microsoft .NET Framework

Three days (24 hours)—\$1,470

Overview

This course teaches how to integrate GIS capabilities into your Web applications, enhancing their value to end users and increasing your value as a developer. You will learn standard guidelines for developing ArcGIS Server Web ADF applications, about the available application programming interfaces (APIs), and how to work with Web ADF controls and data sources. You will develop custom applications that incorporate out-of-the-box tasks and build custom Web tasks to deliver advanced functionality.

Who Should Attend

Experienced Visual Studio* Visual Basic* .NET or C# programmers who have Internet development experience using Microsoft .NET Framework 2.0

Goals

After completing this course, you will be able to

- Use the ArcGIS Server Web ADF to integrate GIS capabilities into your ASP.NET-based Web applications.
- Develop custom Web applications using the .NET Web ADF controls.
- Programmatically implement out-of-the-box tasks in applications.
- Build and deploy custom tasks.
- Develop custom commands and tools using the task framework.

Prerequisites: Yes*

Implementing Tracking Server

Four days (32 hours)—\$1,960

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 Web site 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) who need to collect and distribute real-time data to Web and desktop clients

Goals

After completing this course, you will be able to

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

^{*}For more information, including up-to-date course descriptions, prerequisites, and schedules, visit **www.esri.com/coursecatalog**.

Mobile GIS

Authoring and Serving ArcGIS Mobile Projects Two days (16 hours)—\$980

Overview

This course teaches a recommended workflow to successfully create and deploy an out-of-the-box ArcGIS Mobile project to inspect, collect, and edit GIS data in the field. Beginning at the planning phase and working through the project deployment process, you will learn how to adapt existing data, maps, and GIS workflows to the mobile environment. 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 out-of-the-box ArcGIS Mobile functionality
- Developers who want to understand out-of-the-box ArcGIS Mobile functionality

Goals

After completing this course, you will be able to

- Plan a mobile project for use within an enterprise system.
- Choose an appropriate data transaction model to support real-time field data collection and editing.
- 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 parent geodatabase.
- Update and maintain a mobile project over time.

Prerequisites: Yes*

Building ArcGIS Mobile Solutions Using the Microsoft .NET Framework

Two days (16 hours)—\$980

Overview

This course introduces the ArcGIS Mobile Software Development Kit (SDK) for the Microsoft .NET Framework and teaches how to design and build custom mobile solutions that enable situational awareness and real-time geographic data collection in the field. You will learn recommended practices to integrate mobile controls and multiple data sources in mobile applications deployed in the Windows 32 and Windows Mobile environments.

Who Should Attend

- Visual Studio C# and Visual Basic .NET programmers who have development experience using the Microsoft .NET Framework 2.0
- GIS professionals with Visual Studio C# or Visual Basic .NET experience

Goals

After completing this course, you will be able to

- Understand the ArcGIS Mobile architecture and customization options.
- Create and deploy custom application extensions, project extensions, and project tasks.
- Build mobile solutions that allow end users to connect to, display, and
 navigate map data; display and interact with custom layers including
 geoprocessing services, SQL tables, and GeoRSS feeds; access, query,
 and edit feature attributes; sketch geometric features; and connect to,
 display, and collect GPS data.

^{*}For more information, including up-to-date course descriptions, prerequisites, and schedules, visit www.esri.com/coursecatalog.

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Whether you're attending class in a traditional classroom or via the Virtual Classroom, the registration process is the same.

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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.

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- 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.

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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 www.esri.com/trainingmaps.

Course Materials

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

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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.

*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.

3. Download

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GIS Certification Institute



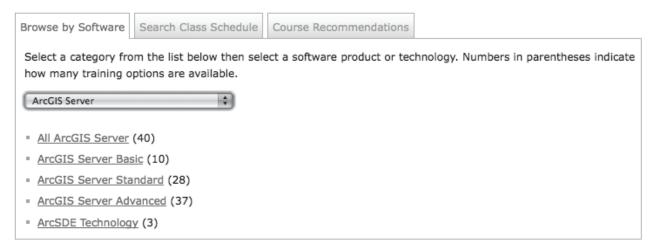
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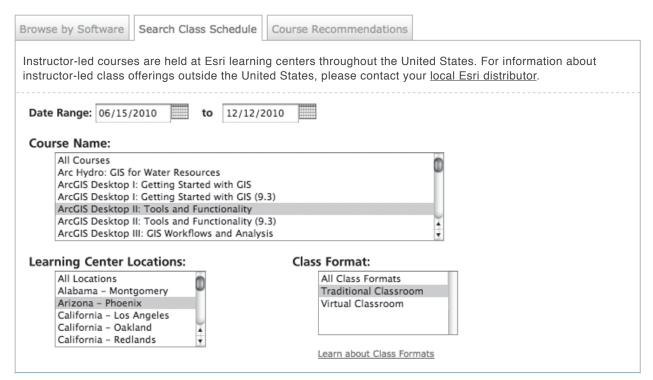
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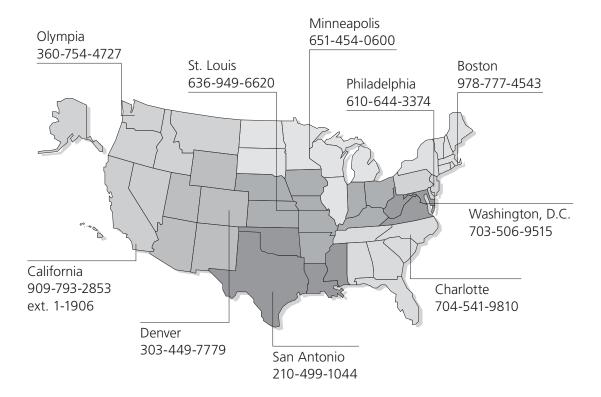
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