

# Training Solutions

2011/2012



**ESRI Canada**

[esricanada.com](http://esricanada.com)

# Welcome to ESRI Canada's Training Solutions

Education and training are a vital component to every successful geographic information system (GIS) implementation. Our training solutions ensure that you not only protect your investment in GIS technology, but also enhance it.

We offer a wide range of training solutions delivered in fully-equipped facilities that are focused on building a smarter and more efficient workforce. We deliver high-quality, high-value technology courses that are mapped to the specific learning requirements of our customers. All courses are available online or can be taken at one of our dedicated training centres or delivered on-site at your organization.

We have an experienced team of professional trainers who have a wide spectrum of knowledge and expertise. Our GIS Training Specialists are committed to delivering an unrivaled learning experience: a high instructor-student ratio makes this possible.

Whether you're a new or advanced user, developer, system architect, database administrator or manager, we can help. We've been working with these technologies for years and can help you ensure success by improving your knowledge and skills. From instructor-led training through to eLearning technology, ESRI Canada can provide you with a training solution that will fill in those knowledge gaps and let you get on with the job at hand.

## Benefits:

### Increase Staff Efficiency



The vast majority of students who learn just a single software task in training can use that knowledge to save hours on the job.

### Raise Staff Productivity



Productivity increases when tasks are completed more quickly, making it possible to complete more tasks in less time.

### Enhance Staff Knowledge



Knowledge is the synthesis of different concepts and skills learned over time. This enables your staff to recognize and avoid errors, thereby reducing liabilities.

### Develop Staff Creativity



Employees who are well trained are far more creative. They can envision new possibilities for products, services and workflows.

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# Training Solutions

## Instructor-Led Training

### Traditional Classroom Courses

- Taught by a certified ESRI instructor with expertise in the course subject matter
- Hands-on practice with the latest ESRI software
- Dedicated time away from the office to focus on learning
- Ability to ask questions and get immediate answers
- Class activities and discussions encouraging peer-to-peer learning
- Available at ESRI Canada Training Centres nationwide; see the inside back cover for a training centre location near you

### Online Classroom Courses

- Real-time class taught online by a certified ESRI instructor with expertise in the course subject matter
- Remote access to the latest ESRI software (students not required to have the latest ESRI software installed on their computer)
- Ability to ask questions and get immediate answers
- Class activities and discussions encouraging peer-to-peer learning
- Convenient attendance from your desktop
- No travel required

For details concerning the technical requirements to attend an instructor-led online course, visit our Web site at [esricanada.com/onlinetraining](http://esricanada.com/onlinetraining).

## Customized Training

ESRI Canada offers customized training to assist organizations in meeting their business and technology needs. Our Professional Services group will work with your organization to identify customized training opportunities and curriculum design requirements. ESRI Canada instructors will customize the course lectures and exercises according to your data and business requirements.



## Private Classes

For organizations that would like to train multiple staff, we offer several different private class options.

### On-site

When you have many employees who require training in the same course, we'll happily come to you and train directly on-site in one of your offices.

### Mobile Lab

If you do not have a suitable space, the ESRI Canada mobile lab option is available for all client-site training classes. With this option, ESRI Canada provides classroom setup service and equipment for each student, including preconfigured hardware and ESRI software.

### ESRI Canada Training Centre

If you would prefer to train at one of our facilities, we can hold a private class for your organization at an ESRI Canada Training Centre.

## Online

For the most cost-effective training solution, we offer private instructor-led online courses.

## Coaching Services

Organizations that host a private ESRI Canada instructor-led class 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 private class, please email [training@esricanada.com](mailto:training@esricanada.com).

## Self-Paced Training

### Web Courses

- 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

### Web Seminars

- One-hour technical presentation and demonstrations delivered by ESRI subject matter experts
- Access available 24/7 via a broadband Internet connection
- No cost

## Additional Resources

<b>Classroom Training:</b>	<a href="http://esricanada.com/training">esricanada.com/training</a>
<b>Online Training:</b>	<a href="http://esricanada.com/onlinetraining">esricanada.com/onlinetraining</a>
<b>Customized Training:</b>	Contact your local office
<b>Mobile Training:</b>	Contact your local office
<b>ESRI Virtual Campus:</b>	<a href="http://esri.com/training">esri.com/training</a>
<b>Web Seminars:</b>	<a href="http://esricanada.com/webseminars">esricanada.com/webseminars</a>
<b>Podcasts:</b>	<a href="http://esri.com/podcasts">esri.com/podcasts</a>



# Why Train with ESRI Canada?

## Interactive Instructor-Led Format Improves User Success

With the introduction of ArcGIS 10, ESRI Canada made a substantial investment in upgrading course design and instructor skills. Our instructor-led course design creates an immersive, experiential approach to learning that will help students 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 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 knowledge and skills.

This approach is applied not only in our traditional classrooms but also in our online classrooms. Online, students participate in small group activities through virtual breakout rooms. Students can interact with each other and the instructor during presentations, demonstrations and exercises via polls, chatting and virtual whiteboards. Instructors can even shadow students' computers to monitor student progress during individual exercises or to check in on groups and facilitate discussion.

## High-Caliber Instructor Skills

All ESRI Canada 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. ESRI Canada instructors have the flexibility to adapt how they present course material based on the composition, skill level and professional interests of each class. This flexibility stretches their creativity and teaching skills in a way that's exciting and beneficial for students.

## Training Recommendations

ESRI Canada will facilitate the development of a training plan for organizations in conjunction with the deployment and implementation of ESRI technology solutions. A comprehensive training plan contributes to the development of skills and knowledge needed to successfully meet the business requirements of your organization.

## 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 50 testing centres across Canada 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

While the skills and knowledge you've acquired on the job will help with exam preparation, our expert-led training courses are highly recommended to ensure you have the latest information. The Candidate Qualifications and Skills Measured sections on the ESRI Technical Certification Web site will help you determine if your skills align with the exam skills and qualifications. From there, you can identify classes that will help you prepare for the exam. To this end, we've introduced two new Skills Review courses.

- ESRI Technical Certification: Skills Review for ArcGIS Desktop Associate (see page 17)
- ESRI Technical Certification: Skills Review for ArcGIS Desktop Professional (see page 17)

For detailed information about the program and each certification, visit [esricanada.com/certification](http://esricanada.com/certification).

To register for an exam, visit [pearsonvue.com/esri](http://pearsonvue.com/esri).

## ESRI Technical Certification

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 2011/2012

## ArcGIS Desktop I: Getting Started with GIS

### Overview

This course teaches the fundamental concepts and basic functions of 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
- Managers and GIS support staff who use ArcGIS infrequently 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 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 in order to find patterns and relationships

### Prerequisites & Recommendations

Knowledge of Windows-based software for basic file management and browsing is required.

**Duration** 2 days | **Price** \$990

## ArcGIS Desktop II: Tools and Functionality

### Overview

This course introduces the fundamental concepts of ArcGIS Desktop software and shows you 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 by geocoding addresses
- Query and analyze GIS data to support decision making
- Create presentation-quality maps

### Prerequisites & Recommendations

This course assumes knowledge of GIS concepts. Completion of ArcGIS Desktop I: Getting Started with GIS or equivalent knowledge is required.

**Duration** 3 days | **Price** \$1485

## ArcGIS Desktop III: GIS Workflows and Analysis

### Overview

Advance your ArcGIS Desktop skills in this course that teaches you 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, GIS specialists and other experienced ArcGIS users who want to extend their basic ArcGIS skills in the areas of data creation and editing, geoprocessing models and 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 & Recommendations

Completion of ArcGIS Desktop II: Tools and Functionality or equivalent knowledge is required.

**Duration** 2 days | **Price** \$990

## What's New in ArcGIS Desktop 10

### Overview

ArcGIS 10 is a major release that introduces powerful new tools and simplified workflows designed to increase your productivity and help you get better results from your GIS. Significant interface improvements and tighter integration of ArcMap, ArcCatalog and Python scripting 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 (GIS analysts, managers, data technicians, specialists and other GIS professionals) who need to learn the new features and workflows of ArcGIS 10.

### Goals

After completing this course, you will be able to:

- Understand the major changes in ArcGIS 10
- Quickly access data, maps and geoprocessing tools in ArcMap using the Catalog window and Search window
- 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 & Recommendations

Completion of ArcGIS Desktop II: Tools and Functionality or equivalent knowledge is required.

**Duration** 2 days | **Price** \$990

## What's New in Editing at ArcGIS Desktop 10

### Overview

At ArcGIS 10, the ArcMap editing environment has been simplified and enhanced to reduce button clicks; provide a more intuitive, sketch-based editing experience; and decrease the time required to create and maintain your GIS data. This course introduces the new editing interface and key workflows you need to understand. In course exercises, you will work with feature templates, which automate many of the tasks involved with creating and editing feature geometry and attributes. You will also get experience using the Parcel Editor toolbar, which replaces the ArcGIS Survey Analyst Cadastral Editor at ArcGIS 10.

### Who Should Attend

Experienced ArcGIS Desktop 9.x users (GIS data technicians, specialists and other GIS professionals) 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 efficiently 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 the Parcel Editor

### Prerequisites & Recommendations

Completion of ArcGIS Desktop II: Tools and Functionality or equivalent knowledge is required.

**Duration** 1 day | **Price** \$495

## Introduction to ArcGIS for Geospatial Intelligence and Law Enforcement

### Overview

This course uses terminology, exercise scenarios and data relevant to your daily work in geospatial intelligence or law enforcement that teach the essential GIS and ArcGIS software skills needed to support your organization's mission. Using ArcGIS tools, learn how to perform basic GIS tasks such as accessing, displaying, querying and editing geographic data. The course concludes with a capstone exercise where you independently apply what you learned by working through one of several scenarios you consider most applicable to your job.

### Who Should Attend

Analysts and other professionals working in the defence, intelligence, homeland security and law enforcement fields who are new to GIS and ArcGIS 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 activities in a spreadsheet
- Select features using logical expressions for route reconnaissance
- Find features based on their locations to other features
- Edit data using ground-truth verification, additional reporting methods or heads-up digitizing
- Associate tables from a reporting database with geographic data for link analysis
- Perform spatial analysis to append information from two geographic layers
- Produce maps for operational and intelligence command briefings

### Prerequisites & Recommendations

Proficiency with Windows-based software for basic file management and browsing is required.

**Duration** 3 days | **Price** \$1485

## Introduction to ArcGIS Desktop for Mining Geoscience

### Overview

This course introduces the ArcGIS tools used to accomplish mining geoscience workflows. In course exercises, you will develop fundamental 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 and GIS/Geology Technicians in the mining industry who need to perform GIS mapping and analysis should take this course in lieu of ArcGIS Desktop II: Tools and Functionality.

### Goals

After completing this course, you will be able to:

- Understand how GIS is used for geoscience applications
- Display and symbolize geoscience data layers on a map
- Create presentation-quality geological maps and graphs
- Generate and view statistics for geoscience data
- Create a geodatabase to store geological, geochemical, geophysical and raster data
- Develop a model that automates geoprocessing tasks used to locate prospective deposits
- Perform GIS analyses to plan efficient mineral exploration activities

### Prerequisites & Recommendations

A thorough understanding of mining terminology and business processes, and a basic understanding of GIS concepts is required. Completion of ArcGIS Desktop I: Getting Started with GIS is recommended.

**Duration** 3 days | **Price** \$1485

## Creating and Publishing Maps with ArcGIS

### 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 little or 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 & Recommendations

Completion of ArcGIS Desktop II: Tools and Functionality or equivalent knowledge is required.

**Duration** 3 days | **Price** \$1485

## Data Production and Editing Techniques

### Overview

Accurate data is crucial to create GIS maps and analyses that decision-makers can rely on. 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 organizations' geographic data.

Note: Those who need to automate data creation and maintenance tasks using scripts may also want to enroll in Introduction to Geoprocessing Scripts Using Python, which complements this course.

### Goals

After completing this course, you will be able to:

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

### Prerequisites & Recommendations

Completion of ArcGIS Desktop II: Tools and Functionality or equivalent knowledge is required.

**Duration** 3 days | **Price** \$1485

## Working with CAD Data in ArcGIS Desktop

### Overview

Knowing how to integrate 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 ArcCatalog and ArcMap
- Display and symbolize CAD data in ArcMap
- Perform an analysis that uses both geodatabase feature classes and CAD feature classes
- 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 & Recommendations

Completion of ArcGIS Desktop II: Tools and Functionality or equivalent knowledge is required.

**Duration** 1 day | **Price** \$495

## Performing Analysis with ArcGIS Desktop

### 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 & Recommendations

Completion of ArcGIS Desktop II: Tools and Functionality and ArcGIS Desktop III: GIS Workflows and Analysis or equivalent knowledge is required.

**Duration** 3 days | **Price** \$1485

## Working with 3D GIS Using ArcGIS

### 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 globes 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 & Recommendations

Completion of ArcGIS Desktop II: Tools and Functionality or equivalent knowledge is required.

**Duration** 2 days | **Price** \$990

## Creating and Analyzing Surfaces Using ArcGIS Spatial Analyst

### 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 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 modelling and analyses such as:

- Finding suitable locations for new development
- Siting cellular and radio towers and mapping potential relay tower sites
- Finding low-visibility locations for storage tank farms
- Finding optimal locations based on site slope and aspect requirements
- Determining lines of fire for military fortifications
- Predicting fire risk

### 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 & Recommendations

Completion of ArcGIS Desktop II: Tools and Functionality or equivalent knowledge is required.

**Duration** 1 day | **Price** \$495

## Geoprocessing Raster Data Using ArcGIS Spatial Analyst

### Overview

This course examines geoprocessing techniques for raster data analysis. In course exercises, you will build map algebra expressions and models to execute geoprocessing workflows and manipulate raster data to make it suitable for analysis. Learn basic concepts of fuzzy logic, a science-based approach to modelling inaccuracy in attribute data, and apply it 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 modelling.

### Goals

After completing this course, you will be able to:

- Apply geoprocessing environment settings to control the properties of output data
- Construct map algebra expressions to execute Spatial Analyst 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 a fuzzy overlay analysis to find potential inaccuracies in attribute data

### Prerequisites & Recommendations

Completion of ArcGIS Desktop II: Tools and Functionality or equivalent knowledge is required.

**Duration** 1 day | **Price** \$495

## Introduction to Esri Business Analyst Desktop (Canadian Edition)

### Overview

This course teaches how to integrate geography and business intelligence data for 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, trade areas and competitors— helping you uncover patterns, trends and opportunities in your customer and sales data.

### Who Should Attend

Business professionals and analysts with no GIS experience who need to better understand their customers, competitors and markets.

### Goals

After completing this course, you will be able to:

- Integrate GIS into business analyses
- Define a study area for analysis to understand how market changes affect existing and proposed store locations
- Create and manage balanced sales territories to better manage resources and minimize cannibalization
- Display customer and business site locations on a map to assess customer proximity and site performance in relation to competitor's locations
- Create trade areas based on customer and store locations to accurately evaluate their potential
- Conduct drive-time and market penetration analyses to determine maximum travel time or distance customers might drive
- Perform customer profiling and prospecting analyses to learn more about your customers and find others like them
- Produce reports and maps to present to decision-makers

### Prerequisites & Recommendations

Knowledge of Windows-based software for basic file management and browsing is required. Although no GIS or ESRI software experience is required, you may find it beneficial to take the free Web course, Getting Started with GIS.

**Duration** 2 days | **Price** \$990

## CrimeAnalyst Extension for ArcGIS 10

### Overview

CrimeAnalyst is a suite of tools created specifically for the analysis of crime data. The software provides the ability to perform analysis in both time and space, enabling applications such as repeat victimization and journey to crime.

In this course, you will learn how to use the tools with real-life crime data and crime analysis examples.

Note: This course does not teach criminology.

### Who Should Attend

New users of CrimeAnalyst from police, fire and ambulance services, as well as others involved in crime analysis.

### Goals

After completing this course, you will be able to:

- Load the CrimeAnalyst Extension
- Setup and configure data
- Perform spatial analysis using standard ArcGIS tools and specific CrimeAnalyst tools
- Perform temporal analysis using specific CrimeAnalyst tools

### Prerequisites & Recommendations

Completion of ArcGIS Desktop 1: Getting Started with GIS or equivalent experience. Knowledge and experience with ArcGIS Desktop Version 10 is required as this is not covered in the course.

**Duration** 1 day | **Price** \$495

## Introduction to Geoprocessing Scripts Using Python

### Overview

Automating complex or time-consuming processes using scripts can increase efficiencies in your GIS workflows and data management. The ArcGIS geoprocessing framework includes the scripting environment Python, which is the scripting language included with ArcGIS.

This course introduces Python scripting syntax and shows how to use scripts to access and automate geoprocessing tasks. You will also work with ArcPy, an ESRI-developed site package for Python that integrates Python scripts into ArcGIS Desktop.

### Who Should Attend

GIS specialists, analysts, data processors 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
- Incorporate cursors, describe objects and list objects into scripts
- Understand commonly used ArcPy classes and functions
- Access geoprocessing tools and specify 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 the production and exporting of a map series using the ArcPy mapping module

### Prerequisites & Recommendations

Completion of ArcGIS Desktop II: Tools and Functionality and ArcGIS Desktop III: GIS Workflows and Analysis or equivalent knowledge. Basic programming skills, such as using loops and conditional statements. Completion of the free, one-hour training seminar Using Python in ArcGIS Desktop 10 is recommended.

**Duration** 3 days | **Price** \$1485

## Programming ArcGIS Desktop Using Add-ins

### Overview

ArcGIS 10 includes the add-in framework for extending ArcGIS Desktop. Add-ins provide a simple and lightweight approach to common customizations and can be shared easily via email, 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 and geoprocessing tools to deploy custom GIS processes.

### Who Should Attend

Developers and GIS professionals with experience in C# 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 & Recommendations

Programming skills, including knowledge of C# are required. Completion of ArcGIS Desktop II: Tools and Functionality or equivalent knowledge is also required.

**Duration** 2 days | **Price** \$990

## ESRI Technical Certification: Skills Review for ArcGIS Desktop Associate

### 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

Reinforce and improve the skills required to perform the tasks listed below:

- Create a file geodatabase, add data to it, and define components used to ensure data integrity
- Assess scale, resolution and coordinate system information to determine whether a dataset is appropriate for a given task
- 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 & Recommendations

Two or more years experience using ArcGIS Desktop software (versions 9.x and 10) to create and edit data, design and publish maps, and perform common GIS analysis operations is required.

**Duration** 2 days | **Price** \$990

## ESRI Technical Certification: Skills Review for ArcGIS Desktop Professional

### Overview

This course helps prepare you to take the ArcGIS Desktop Professional certification exam. In a fast-paced class environment you will review, apply and extend your ArcGIS skills in the following areas: vector and raster data management, data visualization, GIS analysis, modeling and Python scripting, map production and sharing. Course exercises assume proficiency with ArcGIS software, including ArcMap, ArcCatalog and the ArcGIS 3D Analyst, Network Analyst and Spatial Analyst extensions. 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

Reinforce and improve the skills required to perform the tasks listed 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, including distance, network, visibility and suitability analyses
- Create geoprocessing models and Python scripts to automate GIS tasks
- Apply advanced symbology techniques, including cartographic representations, to improve map readability and optimize drawing performance
- Share data, maps and workflows with ArcGIS users and non-ArcGIS users

### Prerequisites & Recommendations

Two or more years experience using ArcGIS software (versions 9.x and 10) to accomplish a variety of GIS tasks and analyses is required.

**Duration** 2 days | **Price** \$990

## Building Geodatabases

### Overview

This course teaches the essential concepts and skills you need to centrally store, manage and maintain the quality of your 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 and behaviors you set. This course is taught using an ArcInfo license of ArcGIS.

### Who Should Attend

GIS data managers, analysts, specialists, data technicians, database administrators and other experienced ArcGIS users who need to store and manage data in a geodatabase.

Note: Those working with a multiuser ArcSDE geodatabase should also enroll in Introduction to the Multiuser Geodatabase.

### Goals

After completing this course, you will be able to:

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

### Prerequisites & Recommendations

Completion of ArcGIS Desktop II: Tools and Functionality or equivalent knowledge is required.

**Duration** 3 days | **Price** \$1485

## Introduction to the Multiuser Geodatabase

### 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, 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
- GIS managers who need to understand the capabilities of a multiuser geodatabase

Note: Those who need to learn how to create the structure of a geodatabase and add advanced features such as subtypes, domains and relationship classes should enroll in Building Geodatabases, which complements this course.

### 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 & Recommendations

Completion of ArcGIS Desktop II: Tools and Functionality and ArcGIS Desktop III: GIS Workflows and Analysis or equivalent knowledge is required.

**Duration** 2 days | **Price** \$990

## Managing Imagery Using ArcGIS

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

### Prerequisites & Recommendations

Completion of ArcGIS Desktop II: Tools and Functionality and Introduction to ArcGIS Server or equivalent knowledge is required.

**Duration** 2 days | **Price** \$990

## Working with Geometric Networks for Utilities

### 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.

### Who Should Attend

- Spatial data managers and GIS technicians who work in the electric, gas or 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 & Recommendations

Completion of ArcGIS Desktop II: Tools and Functionality and ArcGIS Desktop III: GIS Workflows and Analysis or equivalent knowledge is required. Completion of Building Geodatabases is recommended.

**Duration** 1 day | **Price** \$495

## Managing Editing Workflows in a Multiuser Geodatabase

### 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 a nonversioned and versioned environment
- 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 & Recommendations

Completion of ArcGIS Desktop II: Tools and Functionality or equivalent knowledge is required. Familiarity with ArcSDE architecture and working on a Windows platform is also required.

**Duration** 3 days | **Price** \$1485

## Data Management in a Multiuser Geodatabase

### Overview

Organizations using ArcGIS Server can deploy a multiuser ArcSDE geodatabase to centrally manage their GIS data, improve its security and integrity, and deliver editing capabilities to many users. This course teaches database administrators how to successfully load and manage data 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 both workgroup and enterprise geodatabases.

### Who Should Attend

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

Note: Database administrators who need to install and configure ArcSDE should also enroll in ArcGIS Server Enterprise Configuration and Tuning for Oracle or ArcGIS Server Enterprise Configuration and Tuning for SQL Server.

### 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 & Recommendations

Completion of ArcGIS Desktop II: Tools and Functionality or equivalent knowledge is required. Familiarity with basic RDBMS concepts is also required.

**Duration** 3 days | **Price** \$1485

## ArcGIS Server Enterprise Configuration and Tuning for SQL Server

### Overview

This course prepares Microsoft SQL Server database administrators to maximize ArcSDE technology within an ArcGIS Server enterprise geodatabase. 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 managing an enterprise geodatabase are also presented.

### Who Should Attend

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

Note: Those who need to load and manage data for an enterprise geodatabase implementation may also want to enroll in Data Management in a Multiuser 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 storage of vector and raster data
- Configure, create and monitor connections
- Manage nonversioned and versioned editing environments
- Perform data backup and recovery tasks
- Upgrade a workgroup geodatabase to an enterprise geodatabase

### Prerequisites & Recommendations

Experience with Microsoft SQL Server database administration or application development is required. Completion of ArcGIS Desktop II: Tools and Functionality, ArcGIS Desktop III: GIS Workflows and Analysis or Building Geodatabases is recommended.

**Duration** 2 days | **Price** \$990

## ArcGIS Server Enterprise Configuration and Tuning for Oracle

### 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 are also presented.

### Who Should Attend

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

Note: Those who need to load and manage data in preparation for an enterprise geodatabase implementation may also want to enroll in Data Management in the Multiuser Geodatabase, which complements this course.

### Goals

After completing this course, you will be able to:

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

### Prerequisites & Recommendations

Experience with Oracle database administration or application development is required. Completion of ArcGIS Desktop II: Tools and Functionality, ArcGIS Desktop III: GIS Workflows and Analysis or Building Geodatabases is recommended.

**Duration** 2 days | **Price** \$990

## Introduction to ArcGIS Server

### 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 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 & Recommendations

Completion of ArcGIS Desktop II: Tools and Functionality or equivalent knowledge is required.

**Duration** 2 days | **Price** \$990

## ArcGIS Server: Web Administration Using the Microsoft .NET Framework

### Overview

Designed for administrators, 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 for system performance, security and reliability are emphasized.

### Who Should Attend

IT system and GIS administrators, and others responsible for installing, managing and supporting an ArcGIS Server system.

Note: Database administrators who need to set up and manage multiuser ArcSDE geodatabases should take Data Management in a Multiuser Geodatabase, ArcGIS Server Enterprise Configuration and Tuning for Oracle or ArcGIS Server Enterprise Configuration and Tuning for SQL Server instead of this course.

### 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 and access GIS resources
- Configure and build a map cache to optimize performance
- Tune services and the GIS server for optimal performance
- Configure ArcSDE to support Web editing via feature services and versioned data replication via geodata services
- Implement security for Web applications and services

### Prerequisites & Recommendations

Completion of Introduction to ArcGIS Server or equivalent knowledge and an understanding of Web server technologies is required.

**Duration** 3 days | **Price** \$1485

## Creating Effective Web Applications Using ArcGIS Server

### 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. Students may choose to complete some course exercises using the ArcGIS API for Flex, the ArcGIS API for JavaScript or the ArcGIS API for Microsoft Silverlight/WPF.

### Who Should Attend

GIS analysts and others who want to create Web mapping applications to extend the use of GIS data to non-GIS departments within an organization or 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 & Recommendations

Completion of ArcGIS Desktop II: Tools and Functionality and Introduction to ArcGIS Server or equivalent knowledge is required.

**Duration** 2 days | **Price** \$990

## Building Web Applications Using the ArcGIS API for Flex

### Overview

The ArcGIS API for Flex helps you build high-performing, engaging Web applications that incorporate ArcGIS Server mapping, geocoding and geoprocessing services. This course teaches how to leverage the ArcGIS API for Flex and the Adobe Flex platform to efficiently develop rich applications that meet the needs of their intended audience. You will learn about the components available in the Flex platform, how to write code for a Flex-based application and incorporate basemaps and other resources from ArcGIS Online to enhance your Web applications.

### Who Should Attend

Web developers who want to create Flex-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 the 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
- Display map features with different symbols
- Display query results as data grids and charts
- Build a well-designed application interface for end users
- Apply best practices to ensure high performance and proper communication between the client application and the Web server

### Prerequisites & Recommendations

- Completion of Creating Effective Web Applications Using ArcGIS Server or equivalent knowledge
- Familiarity with Adobe Flex Platform concepts. Those unfamiliar with Flex concepts should complete the first three days of Flex in a Week (free Web training from Adobe)
- Knowledge of the Flex software development kit (SDK)

**Duration** 2 days | **Price** \$990

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

### Overview

Using the ArcGIS API for Microsoft Silverlight/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

Web developers who want to create Silverlight applications that include GIS services and functionality.

### Goals

After completing this course, you will be able to:

- Develop applications 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
- Incorporate GIS operations such as geocoding, geoprocessing, editing and routing

### Prerequisites & Recommendations

- Completion of Introduction to ArcGIS Server or equivalent knowledge is required. Completion of Creating Effective Web Applications Using ArcGIS Server is recommended
- Programming experience with VB.NET or C# and familiarity with the Silverlight Platform, Web service concepts and the Extensible Application Markup Language (XAML) are also required

**Duration** 2 days | **Price** \$990

## Building Web Applications Using the ArcGIS API for JavaScript

### Overview

Using the ArcGIS API for JavaScript, you can build high-performing, engaging Web applications that incorporate GIS mapping, editing and geoprocessing functionality. This course teaches how to leverage the 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 the JavaScript API, how to write code for a JavaScript-based application 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 the ArcGIS API for JavaScript
- Incorporate ArcGIS Server services that allow users to query, visualize and edit 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 the Web server

### Prerequisites & Recommendations

- Completion of Creating Effective Web Applications Using ArcGIS Server or equivalent knowledge
- Experience with JavaScript, including HTML

**Duration** 2 days | **Price** \$990

## System Architecture Design Strategies

### 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 and software architects who need to increase their knowledge of enterprise GIS system design
- GIS managers, project managers and software developers who need to understand system architecture and hardware capacity planning criteria
- IT and system administrators and consultants who need to understand, identify and troubleshoot 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 identified user workflows
- Recognize factors impacting GIS performance and scalability
- Identify network bandwidth requirements
- Apply best practices for incorporating security throughout system design and deployment
- Understand how platform technology affects ArcGIS performance and capacity
- Develop a target enterprise hardware design for capacity planning

### Prerequisites & Recommendations

Review the System Design Strategies Wiki site at [esri.com/systemdesign](http://esri.com/systemdesign).

**Duration** 3 days | **Price** \$1485

## Creating Viewers and Sites with Geocortex REST Technologies

### Overview

This course is designed to provide attendees with a solid understanding of Geocortex Essentials REST technologies. The course covers the use of the Geocortex Essentials Manager for REST Elements and the configuration of the Geocortex Viewer for Silverlight. Students are led through a series of modules, each built upon the foundation laid by the previous module. By the conclusion of the course, students can expect to have a solid foundation for deploying Geocortex Essentials REST Elements sites that can be used by the Geocortex Viewers or by client API applications, and how to configure the Geocortex Viewer for Silverlight.

### Who Should Attend

Ideally suited for those new to Geocortex Essentials REST Elements, this course is targeted for GIS coordinators, analysts and managers eager to learn more about Geocortex Essentials REST Elements' capabilities and configuration.

### Goals

After completing this course, you will be able to:

- Install and configure Geocortex Essentials REST Elements
- Understand the application framework and site architecture
- Use a client API viewer to build your first site
- Configure a site using Geocortex Essentials Manager
- Mashup multiple map resources into a single application
- Link to external, non-spatial data and tie to Geocortex Essentials tools/reports/workflow
- Build print and custom report templates exportable in multiple formats
- Customize a client API viewer
- Deploy, configure and customize the Geocortex Viewer for Silverlight

### Prerequisites & Recommendations

Students are expected to be familiar with GIS, programming and Web application concepts.

**Duration** 2 days | **Price** \$990

## Geocortex Workflows

### Overview

This course is designed to provide attendees with a solid understanding of Geocortex Workflow. The course covers how to conduct simple business analysis to determine your business and user needs; the use of the Geocortex Workflow Designer to create workflows; and the configuration of the Geocortex Viewer for Silverlight to run the created workflows. Students are led through a series of modules, each built upon the foundation laid by the previous modules, including those from the Creating Viewers and Sites with Geocortex REST Technologies workshop. By the conclusion of the course, students can expect to have a solid foundation for creating workflows and deploying them to the Geocortex Viewer for Silverlight or by client API applications.

### Who Should Attend

Ideally suited for those familiar with Geocortex Essentials REST Elements, this course is for GIS coordinators and analysts eager to learn more about Geocortex Workflow and Forms capabilities and configuration. ArcGIS Server REST API developers are welcome to attend and may proceed through the modules at their own pace.

### Goals

After completing this course, you will be able to:

- Conduct simple business analysis to determine your business and user needs
- Create simple and complex workflows using the Geocortex Workflow Designer
- Launch workflows from the Geocortex Viewer for Silverlight

### Prerequisites & Recommendations

Students are expected to be familiar with GIS, programming and Web application concepts. Students are also expected to have taken the Creating Viewers and Sites with Geocortex REST Technologies course or have equivalent knowledge and experience.

**Duration** 1 day | **Price** \$495

## Authoring and Serving ArcGIS Mobile Projects

### 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.

Note: This course covers ArcGIS Mobile projects that will be deployed on the Windows Mobile and Windows operating systems. This course does not address other platforms or devices.

### Who Should Attend

- GIS analysts and others who want to create 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 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 & Recommendations

Students are expected to be familiar with GIS, programming and Web application concepts.

**Duration** 2 days | **Price** \$990

## Technology Courses by Request

- Working with ArcGIS Spatial Analyst for Geospatial Intelligence
- ArcHydro: GIS for Water Resources
- Hydrologic and Hydraulic Analyses Using ArcGIS
- Cartography with ESRI Production Mapping
- Introduction to ESRI Aeronautical Solution
- Configuring ESRI Aeronautical Solution
- Introduction to ESRI Defence Mapping
- Data Editing with ESRI Production Mapping
- Quality Control Using ArcGIS Data Reviewer
- Understanding ArcGIS Workflow Manager





# Registration Information

## Registration Application

A completed registration application is required from each class participant. Registrations are processed on a first-come, first-served basis. We recommend that you submit this registration information at least one month before your class begins. The most convenient way to register is to use our secure online registration system accessible at [esricanada.com/training](http://esricanada.com/training).

The online registration system contains the most up-to-date class schedule and seating information. Online registrations will be acknowledged via email along with additional course information. Alternatively, you may contact the ESRI Canada Regional Office nearest you to register. You will receive an acknowledgment letter confirming your payment and seating status.

## Cancellation Policy

- Cancellations received 14 calendar days or more before the course start date will be refunded in full, can be transferred or can be used as a credit\*
- Cancellations received 6-13 calendar days before the course start date will be subject to the course fee; however, the registration is transferable or can be used as a credit\*
- Cancellations received 5 calendar days before the course start date will be subject to the full course fee and are not transferable

\*Credits can be used for an equivalent ESRI Canada course within a year's time.

ESRI Canada strives to confirm all courses; however, class cancellations are sometimes unavoidable. ESRI Canada will confirm or cancel courses by contacting each participant. Invoicing will occur at the time of course confirmation.

## Other Course Fees and Taxes

- Course fees may vary where additional instructor, travel and/or facility costs apply
- In addition to fees, courses are subject to GST, HST or QST depending on jurisdiction

## Travel

Travel is the registrant's responsibility. ESRI Canada assumes no responsibility for non-refundable travel arrangement losses resulting from course scheduling changes or cancellations.

## Lodging and Meals

Participants are responsible for making their own lodging arrangements. Meals are not provided.

## Course Materials

For traditional classroom training, all course materials are provided on site. Materials for online classroom training will be available for download.

# Locations Across Canada

## BRITISH COLUMBIA

### Vancouver

1130 West Pender, Suite 610  
Vancouver, BC V6E 4A4  
Tel: 604-682-4652  
Fax: 604-682-5692  
pacificsales@esricanada.com

### Victoria

702 Fort Street, Suite 300  
Victoria, BC, V8W 1H2  
Tel: 250-383-8330  
Fax: 250-383-3846  
pacificsales@esricanada.com

### Kelowna

1708 Dolphin Avenue, Suite 406  
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Tel: 250-861-3774  
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