

# Introduction to ArcGIS I

## Overview

Welcome to ArcGIS®. Here begins the foundation for becoming a successful ArcView®, ArcEditor™, or ArcInfo™ user. This course covers fundamental GIS concepts as well as how to query a GIS database, manipulate tabular data, edit spatial and attribute data, and present data clearly and efficiently using maps and charts. Participants learn how to use ArcMap™, ArcCatalog™, and ArcToolbox™ and explore how these applications work together to provide a complete GIS software solution.

## Audience

This course is for those who are new to ArcGIS and new to geographic information systems in general.

## Goals

- Display feature and tabular data
- Work with georeferenced spatial data
- Query features using logical expressions
- Find features using spatial relationships
- Edit spatial and attribute data
- Associate tables with joins and relates
- Produce maps, reports, and graphs

## Topics covered

ArcGIS overview: Capabilities and applications; Interacting with the interface; Basic display

Spatial data concepts: Representing spatial data and descriptive information

ArcGIS data model: Geodatabases; Shapefiles; Coverages; Feature types; Attributes

GIS software: Components; Functions; Applications

Spatial coordinate systems and map projections: Georeferencing data; What map projections are; How ArcMap works with map projections

Querying data: Selecting and identifying features; Creating reports and graphs

Map displays: Creating; Symbolizing; Scaling; Adding map elements

## Prerequisites and recommendations

Participants should know how to use windowing software. This course provides the fundamental ArcGIS knowledge and experience needed to enrol in *Introduction to ArcGIS II*.