# Making Sense of Projections and Datums in ArcGIS

| | |
|---|---|
| *Course Length:* | *1 day* |
| *ArcGIS Version:* | *10.x* |
| *App:* | *ArcMap* |

## Overview

This one-day course teaches students the essentials of map projections and coordinate systems, and what they need to know about projecting geographic data with ArcGIS.  Common datums are explained along with a discussion of the error introduced when the incorrect datum is chosen for a dataset.  Various map projections, and how to manage data in these projections in ArcMap, are covered in detail.

## Audience

Those who are already comfortable with the basics of ArcGIS, but who want to learn more about map projections and map coordinate systems in ArcGIS.

## Topics Covered

Day 1

- Geographic Coordinate Systems (The World's Shape; Datums; Datum Transformations)
- Map Projections and Projected Coordinate Systems (Projection Types; Controlling Distortion; Commonly Used Projections; Universal Transverse Mercator Coordinate System; State Plane Coordinate System)
- Projections in ArcGIS (Defining Your Projection in ArcGIS; Projection Information in ArcGIS; Projecting Vector Data; Projecting Raster Data; Projections and Calculating Geometry; Projections and Editing)

## Format

In-person instruction with hands-on practice and course materials you can keep.

## Prerequisites and Recommendations

Attendees should have knowledge of Microsoft Windows® and be familiar with the basic use of ArcGIS, including the topics covered in either the **Fundamentals of ArcGIS** or **ArcGIS Desktop I** classes.