

# Making Sense of Projections and Datums in ArcGIS

*Course Length:* 8 hrs  
*ArcGIS Version:* 10.x

## 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.