



# Foundation

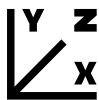
## Understanding Map Projections

Duration: 1 Day (8 Hours)

In this course, you will understand the shape of the earth: the geoid and the spheroid and how they are connected to the various coordinate systems. You will understand the geographic and projected coordinate systems. You will learn how to use these coordinate systems in the ArcGIS software and create custom coordinate systems using ArcGIS Pro. You will also be able to define or change a projection and understand how ArcGIS Pro works with projection on-the-fly. Finally, you will be able to convert degrees, minutes, and seconds to decimal degrees.

**Note:** Course concepts apply to ArcGIS 10.4, 10.5, and 10.6.

### Goals



**Identify** the spatial reference information for various datasets



**Create** custom coordinate systems and define projections for a dataset with missing spatial reference



**Add** data with different coordinate systems to a map document and be able to convert coordinate units

### Who should attend?

Refreshing ArcGIS Skills

Intermediate GIS Users

#### Suggestion

Completion of **ArcGIS: Basic** or equivalent knowledge is required.

#### Software

Esri will provide the following software to use during class:

- **ArcGIS Desktop 10.5 (Basic, Standard or Advanced)**