

# Creating and Editing Data with ArcGIS Pro

**DURATION: 1 Day** 

## **DESCRIPTION**

This course teaches best practices to create accurate geographic data and maintain it over time. You will get ample hands-on practice with a variety of ArcGIS Pro tools that streamline the editing process and decrease the potential for errors when updating your GIS database.

## **LEARN HOW TO**

- Apply a standard editing workflow to manage updates to geographic data.
- Configure ArcGIS Pro application and project settings to support efficient editing.
- Create, modify, and delete 2D and 3D features and attributes.
- Solve common data alignment issues and maintain spatial relationships among features when editing.

## **PREREQUISITE**

Completion of ArcGIS Pro: Essential Workflows or equivalent knowledge.

# **COURSE OUTLINE**

- Introduction to editing
- Editing in ArcGIS Pro
- Editing tasks
- Exercise 1: Investigate ArcGIS Pro editing tools
  - Start ArcGIS Pro and open a project
  - Explore the Create Features pane
  - Investigate modification tools
  - Discard edits
- What can you edit?
- Creating, modifying, and deleting features

### Preparing to edit GIS data

- Exercise 2A: Investigate coordinate systems
  - Open an ArcGIS Pro project and identify map and layer spatial references
  - Measure the offset between layers
  - Change the map XY coordinate system and add a new layer
- Lining up data
- Managing attributes
- Exercise 2B: Enable editor tracking on a feature class
  - Open an ArcGIS Pro project and view the data attributes
  - Run the Enable Editor Tracking tool
  - Make an edit
- Layer symbology for editing
- App and project settings for editing
- Configuring ArcGIS Pro and your project for editing
- Exercise 2C: Prepare a map for editing
  - Open an ArcGIS Pro project and change the default measurement units
  - Change the map's coordinate system

- Configure the layer attributes to make editing more efficient
- Set layer selectability and editability

# Creating 2D features

- Feature creation workflow
- Feature templates
- Group and preset templates
- Choosing a construction tool
- Managing feature templates
- Exercise 3A: Create 2D features using feature templates
  - Start ArcGIS Pro and zoom to a bookmark
  - Investigate how symbology affects feature templates
  - Use a feature template to create new geometry
  - Create attributes for your new feature
  - Create a preset template
  - Create a new set of features using a preset template
- Dynamic constraints
- Snapping
- Editing grid
- Creating attributes
- Exercise 3B: Filter the undo and redo stacks
  - Open an ArcGIS Pro project and create new features
  - Undo and redo actions
- Exercise 3C: Use placement tools to create features
  - Open an ArcGIS Pro project and zoom to a bookmark
  - Prepare the editing environment



- Create new feature geometry
- Use snapping to create new polygons
- Use dynamic constraints and snapping to create a polygon
- Add attributes to new features

## Modifying 2D features

- Modifying GIS data
- Feature modification workflow
- Modification tools
- Modifying geometry and attributes
- Exercise 4: Modify existing features
  - Open an ArcGIS Pro project
  - Relocate a point feature
  - Modify polygon shapes
  - Connect a multipart feature
  - Combine two features

#### Maintaining spatial integrity

- Using map topology
- Exercise 5A: Use map topology while editing
  - Create a map topology
  - Use a topology to modify coincident point and line features
  - Use the Align Edge tool to eliminate polygon overlaps
  - Use the Align Edge tool to remove gaps
- Geodatabase topology
- Comparing map and geodatabase topology
- Exercise 5B: Use geodatabase topology to maintain spatial integrity
  - Start ArcGIS Pro and investigate topology rules
  - Validate a topology
  - Use the Error Inspector to locate errors
  - Fix a topology error

- Mark an error as an exception
- Use editing tools to fix an error
- Use a predefined fix to correct a data error
- Correct topology errors
- Revalidate a topology

#### Editing annotation

- Annotation
- Creating annotation
- Exercise 6A: Create annotation features
  - Create feature-linked annotation
  - Create a new annotation feature class
  - Create standard annotation
- Modifying annotation
- Using the Attributes pane to modify annotation
- Exercise 6B: Modify existing annotation
  - Modify annotation position
  - Edit annotation text
  - Split annotation to two lines
  - Modify annotation rotation and position
  - Use vertices to modify annotation features

#### Creating and modifying 3D features

- Points, lines, and polygons in 3D
- Placement tools in 3D
- Exercise 7A: Create polygon features in a 3D scene
  - Start ArcGIS Pro and check the vertical coordinate system
  - Add a cartographic offset
  - Create a new polygon feature
  - Use snapping to create a coincident polygon



- Extrude z-aware polygons
- Create a point feature and symbolize it in 3D
- Multipatch data in ArcGIS Pro
- Creating multipatch data in ArcGIS Pro
- Exercise 7B: Create a new multipatch feature
  - Prepare the ArcGIS Pro scene
  - Sketch a new multipatch feature
- Duplicating features vertically
- Modifying 3D data in ArcGIS Pro
- Exercise 7C: Modify multipatch data in ArcGIS Pro
  - Rotate a 3D feature
  - Add a new face to an existing multipatch feature
  - Extrude a multipatch face
  - Create new faces using interactive guides