

# Geoprocessing and ModelBuilder

*2-Day Course*

## Overview

This two-day course introduces students to geoprocessing concepts and application in ArcGIS. Students will be introduced to a wide range of tools available in ArcToolbox, and will learn how to apply these tools effectively, and how to combine them together and incorporate them into automated workflows (models) through the ModelBuilder interface.

## Audience

This course is for those who are already comfortable with ArcGIS and want to learn more about geoprocessing and ModelBuilder.

## Topics Covered

### Day 1

- Geoprocessing (Data Types; Geodatabases; Geodatabase Benefits; Populating the Geodatabase; Geoprocessing; ArcToolbox; Using Tools; Tool Help)
- Working with ModelBuilder (What, Why, When, Who, and Where?; Custom Toolboxes; ModelBuilder Interface; Creating, Saving, and Running a Model)
- Cool Tools (Data Creation Tools; Tools for Data QC and Cleanup; Filtering Tools; Attribute Management Tools; Data Creation Tools; Environment Settings)
- Model Settings (Editing Models; Intermediate Data; Managed Data; Model Properties; Model Parameters; Model Validation; Preconditions; Variables)

### Day 2

- Consuming Data (Data Types; Make Feature Layer; Copy Features; Make Table View; Make Query Table; Copy Rows; Make Raster Layer; Save to Layer File)
- Awesome Operations (Quality Control Tools; Data Creation Tools; Filter Tools; Geoprocessing Tips and Tricks; Advanced Tools)
- Final Project

## Prerequisites and Recommendations

Students 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.