

# **Introduction to ArcGIS® Pro for GIS Professionals**

Student Edition

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## Course introduction

- Introduction
- Course goals
- Additional resources
- Installing the course data
- Icons used in this workbook
- Understanding the ArcGIS Platform

## 1 Getting started with ArcGIS Pro

- Lesson introduction
- Features of the ArcGIS Pro environment
- Exercise 1: Navigate the ArcGIS Pro interface
  - Start ArcGIS Pro and sign in
  - Add a map and set project properties
  - Navigate a map
  - Modify layer symbology
  - Perform basic mapping tasks
  - Select features
- ArcGIS Pro and the ArcGIS platform
- ArcGIS Pro structure
- Lesson review

## 2 Sharing maps, layers, and processes

- Lesson introduction
- Sharing with ArcGIS Pro
- Packaging your work
- Sharing on the web
- Methods of sharing
- Choose the correct sharing method
- Exercise 2A: Package GIS layers
  - Create a layer file
  - Create a layer package
  - Create a web layer
- Tasks
- Sharing processes using tasks
- Exercise 2B: Create a task and a project package
  - Create a task item
  - Create a task
  - Add a step to import a map
  - Record steps for your task
  - Test your task
  - Share your task
  - Create a project package
- Lesson review

## 3 Editing data

Lesson introduction

Designing a schema

Domains and subtypes

Exercise 3A: Edit schemas using ArcGIS Pro

- Begin a new project

- Create a feature class

- Apply a domain to a new field

- Create subtypes

Editing features and attributes

Editing basics and group feature templates

Exercise 3B: Edit features and attributes

- Edit the Streams layer

- Create a new temporary fence using measurements

- Update attributes for the new fence

- Create a new fence by tracing

- Calculate a field

- Digitize a lake polygon

Lesson review

## 4 Displaying data

Lesson introduction

Symbolizing vector data

The functionality of vector symbology

Exercise 4A: Use ArcGIS Pro to visualize vector data

- Start a project and add layers

- Work with effects on the block groups layer

- Symbolize block groups using graduated colors

- Modify symbology for earthquakes

- Modify symbology for faults

- Set display scale ranges on layers

- Label features

- Create label classes

Symbolizing raster data

Functions and geoprocessing tools

The functionality of raster symbology

Exercise 4B: Symbolize raster data using ArcGIS Pro

- Modify raster symbology

- Apply raster functions to modify display

- Create a function chain

- Interpolate surfaces to visualize point data

- Create a map package

Lesson review

## 5 Working with 3D data

Lesson introduction

Why use 3D?

Local and global scenes

Creating and displaying 3D data

Three-dimensional analysis

Creating 3D cities

Use rule package to create features

Extruding features

Exercise 5: Visualize data in 3D

- Open a map file

- Convert a map to a scene and set elevation source

- Symbolize the damaged buildings in 3D

- Display earthquakes in 3D

Lesson review

## 6 Performing analysis

Lesson introduction

Common types of spatial analysis

Performing analysis

Analysis environments

Analysis in ArcGIS Pro

Exercise 6: Analyze storm surge data

- Add a layer package from ArcGIS Online

- Extract features in your area of interest

- Identify schools in storm surge

- Locate potential emergency shelters

- Create a web map

- Build and run a model

Lesson review

## 7 Creating map layouts

Lesson introduction

Map layouts

Creating layouts

Exercise 7: Create a map layout

- Set up a layout page

- Add a 2D map to a layout

- Add a 3D scene to a layout

- Add map elements to a layout page

- Share the layout

- (Optional) Add new layouts to a project

Lesson review

## Appendixes

Appendix A: Esri data license agreement

Appendix B: Answers to lesson review questions

Lesson 1: Getting started with ArcGIS Pro

Lesson 2: Sharing maps, layers, and processes

Lesson 3: Editing data

Lesson 4: Displaying data

Lesson 5: Working with 3D data

Lesson 6: Performing analysis

Lesson 7: Creating map layouts