



## ArcGIS Pro: Advanced

**Duration:** 5 Days

**Registered unit standards:**

**Demonstrate an understanding of map composition elements in map production** (SAQA

US ID: 258656, NQF Level: 6, Credits: 4)

**Develop simple SQL queries** (SAQA US ID: 258642, NQF Level: 6, Credits: 4)

### Overview:

Welcome to *ArcGIS Advanced with Pro*. A GIS is valuable because it is a digital representation of the real world. However, that value largely depends on the accuracy and currency of the data in the GIS. For decades, ArcGIS software has been used to visualize geographic data by creating maps. With ArcGIS Pro, you can still create traditional 2D maps, but you can also create other types of visualizations, such as 3D scenes, animations, charts, and web maps.

In this course, you will learn essential concepts and a standard workflow that you can apply to any editing, spatial analysis, creating maps and visualisation project. You will also learn how to create and modify 2D GIS data geometry and attributes while using tools to maintain the spatial integrity of your data. Furthermore, you will learn the basics you need to know to create effective visualizations that fulfill their intended purpose and meet the needs of your audience. You will learn some foundational cartographic concepts, and how to apply them to different types of information products.

This course will help you understand GIS analysis, which helps people answer questions about their data and the spatial relationships within the data. It teaches a standard GIS analysis workflow that can be applied to any analysis question.

### After completing this course, you will be able to:

- Solve common data alignment issues and maintain spatial relationships among features when editing.
- Configure ArcGIS Pro application and project settings to support efficient editing
- Apply a standard editing workflow to manage updates to geographic data
- Quantify spatial patterns using spatial statistics and analyze change over time to identify emerging hot spots.



# GIS Professionals

- Use interpolation and regression analysis to explain why patterns occur and predict how patterns will change.
- Prepare data and choose appropriate tools and settings for an analysis.
- Examine features and distribution patterns within an area of interest and identify optimal locations using 2D and 3D analysis tools.
- Prepare data for a mapping project.
- Design map elements that are appropriate for your data, audience, map purpose, and delivery medium.
- Apply 2D and 3D cartographic best practices to create and share print maps, web maps, and 3D scenes.
- Create animations to visualize dynamic data

## Who Should Attend?

GIS analysts, specialist, and others who manage or conduct GIS analysis projects.

## Prerequisites and recommendations:

Completion of ArcGIS Pro: Standard or equivalent knowledge is required.

## Must not attend ArcGIS Basic if you have completed the following courses:

Editing data in ArcGIS Pro (EDAP)

Spatial Analysis with ArcGIS Pro (SNAP)

Creating Maps and Visualization with ArcGIS (MVIZ)

## Esri will provide the following software to use during class:

- ArcGIS Pro (Basic, Standard or Advanced) including spatial analyst
- ArcGIS 10.5 for Server Enterprise (Standard)