

Fundamentals of ArcGIS (Petroleum)

2-Day Course

Overview

ArcGIS is a powerful and complex tool for viewing and analyzing data. With so much functionality available in the software, it can be difficult to get started. This 2-day class teaches essential skills for being efficient with ArcGIS. Explore GIS data through ArcMap and create maps to illustrate relationships in the data. Learn methods of displaying data with symbols and text. See how to ask questions of the data and get answers. The lecture material and class exercises focus on examples and situations that are relevant to the oil and gas industry.

Audience

This course is primarily for those in the petroleum industry who want to learn the basics of ArcGIS.

Topics covered

Day I

Introduction to ArcGIS

- GIS Concepts
- ArcGIS Software
- ArcMap Basics
- Navigation in ArcMap

Layer Properties

- Filtering Data
- Symbolizing Data Layers
- Labeling Layers
- Saving Properties with Layer Files

Basic Labeling

- Label Properties
- Label Classes
- Placement Properties
- Priority and Weight Rankings

Layouts

- Layout View and Toolbar
- Setting Up a Page
- Map Scale and Extent
- Map Elements
- Templates
- Printing

Day 2

Data Types, ArcCatalog, and Metadata

- ArcCatalog
- Metadata
- Valid Formats
- Contents and Preview Tabs
- Managing GIS Data

Selections and Queries

- Adding Layers to a Map
- Determining Coordinate System
- Setting Measure Units
- Selecting by Attributes
- Selecting by Spatial Relationship

Projection Basics

- Spatial Reference Issue
- Spatial Reference and ArcGIS
- Define Projection tool

ArcGIS Online and Wrap-Up

- Adding data from outside sources
- Using data from ArcGIS Online
- Wrap-Up and Review

Prerequisites and recommendations

Knowledge of Microsoft Windows®