

Data Analysis and Visualization with Microsoft® Excel®

Course Specifications

Course Number: 091157

Course Length: 2 days

Course Description

Prerequisites:

To ensure success, you should have baseline skill using Microsoft Excel worksheets, particularly in creating workbooks with formulas and functions. You can obtain this level of knowledge and skill by taking the following or any similar equivalent Logical Operations course:

Microsoft® Excel® for Office 365 (Desktop or Online): Part 1

Course-specific Technical Requirements

Hardware Recommendations

For this course, you will need one computer with the following minimum hardware configurations:

- 1 gigahertz (GHz) 64-bit (x64) processor.
- 2 gigabytes (GB) of Random-Access Memory (RAM).
- 32 GB available storage space.
- Monitor capable of a screen resolution of at least 1,024 x 768 pixels. A second monitor is recommended, but not required, for an ideal learning experience.
- Keyboard and mouse.
- Internet access

Software

- Microsoft® Office Professional Plus 2019 or Office 365
- Microsoft® Windows® 10 Professional or Enterprise

Course Content

Lesson 1: Data Analysis Fundamentals

Topic A: Data Analysis Scenarios

Topic B: Tables

Topic C: Sort and Filter Data

Lesson 2: Visualizing Data with Excel

Topic A: Visualize Data with Charts

Topic B: Modify and Format Charts

Topic C: Best Practices for Selecting Charts

Lesson 3: Analyzing Data with Formulas and Functions

Topic A: Analyze Data with Formulas

Topic B: Analyze Data with Functions

Topic C: Analyze Data with Data Validation, Forms, and Controls

Topic D: Create Conditional Visualization with Lookup Functions

Lesson 4: Analyzing Data with PivotTables

Topic A: Create a PivotTable

Topic B: Analyze PivotTable Data

Lesson 5: Presenting Visual Insights with Dashboards in Excel

Topic A: Visualize Data with PivotCharts

Topic B: Filter Data Using Slicers

Topic C: Create a Dashboard in Excel



Lesson 6: Creating Geospatial Visualizations with Excel

Topic A: Create Map Charts in Excel

Topic B: Format and Customize Map Charts in Excel

Lesson 7: Performing Statistical Analysis

Topic A: Visualize Trendlines and Sparklines with Excel

Topic B: Analyze Data with the Data Analysis ToolPak

Lesson 8: Getting and Transforming Data

Topic A: Connect to Data with Queries

Topic B: Clean and Combine

Topic C: Shape and Transform Data

Lesson 9: Modeling and Analyzing Data with Power Pivot

Topic A: Install Power Pivot in Excel

Topic B: Create Data Models with Power Pivot

Topic C: Create Power Pivots

Topic D: Perform Advanced Data Analysis and Visualization

Lesson 10: Presenting Insights with Reports

Topic A: Planning a Report

Topic B: Creating a Report