

Data Analysis and Visualization with Excel Training

Microsoft Authorized Training · Applied Technology Academy

This hands-on course introduces participants to data analysis and visualization techniques using Microsoft Excel. Learners will explore a variety of tools such as tables, PivotTables, PivotCharts, conditional formatting, formulas, functions, and Excel's powerful visualization features to derive meaningful insights from data.

LEVEL	DURATION	EXPERIENCE	AVERAGE SALARY	LABS
Intermediate	2 Days	1 year: Microsoft	\$95,000 – \$100,000	Yes

Course Overview

This course is ideal for professionals who want to make data-driven decisions and present data in an effective, compelling way.

You will:

- Clean and prepare datasets for analysis
- Apply Excel's built-in tools to analyze large datasets
- Use formulas and functions to summarize data
- Build and customize PivotTables and PivotCharts
- Apply conditional formatting and data bars for visual emphasis
- Create dashboards and data summaries
- Utilize charts to visually represent trends and comparisons
- Share reports with others using print, PDF, and Excel online

Course Outline

- **Module 1: Introduction to Data Analysis in Excel**
 - Overview of data analysis process
 - Importance of structured data
 - Introduction to Excel's data analysis capabilities
 - Keyboard shortcuts and productivity tips
- **Module 2: Preparing and Cleaning Data**
 - Removing duplicates and blank values
 - Text to columns and Flash Fill
 - Using filters and sorting
 - Data validation and removing errors

- Converting data to Excel Tables
- **Module 3: Formulas and Functions for Analysis**
 - SUM, AVERAGE, COUNT, MIN, MAX
 - Logical functions: IF, AND, OR
 - Lookup functions: VLOOKUP, HLOOKUP, XLOOKUP
 - Text functions: CONCAT, LEFT, RIGHT, MID, LEN
 - Date and time functions
- **Module 4: PivotTables and PivotCharts**
 - Creating PivotTables from raw data
 - Grouping, filtering, and sorting in PivotTables
 - Using slicers and timelines
 - Building PivotCharts to visualize summarized data
 - Designing interactive dashboards with slicers and filters
- **Module 5: Data Visualization Techniques**
 - Choosing the right chart type
 - Creating and customizing:
 - Column, bar, and line charts
 - Pie and donut charts
 - Combo charts
 - Waterfall and sparkline charts
 - Using data bars, icon sets, and color scales
- **Module 6: Using Excel's Data Analysis Tools**
 - Quick Analysis Tool
 - Goal Seek and What-If Analysis
 - Introduction to Power Query (optional)
 - Introduction to Power Pivot (optional)
- **Module 7: Creating Dashboards and Reports**
 - Combining charts, tables, and slicers
 - Using named ranges and form controls
 - Formatting for clarity and presentation
 - Exporting to PDF and printing reports
 - Sharing files with Excel Online and OneDrive

Intended Audience

This course is designed for professionals and students who want to build foundational skills in data analysis using Microsoft Excel.

Prerequisites

- Basic familiarity with Microsoft Excel
- Experience working with spreadsheets and simple formulas
- No prior experience with data analysis or advanced Excel features required

Follow-On Courses

Microsoft Power BI

Ready to enroll? Call 800.674.3550 or email Info@AppliedTechAc.com — private team cohorts, GSA MAS purchasing, military credentialing funding, VA GI Bill and VR&E and student financing available.