



Data Visualization using Microsoft® Excel (2 days)

Course Description:

Excel reports, charts, and graphs are numerous and plentiful, yet many are confusing and lack focus or clear messaging. This course provides direction and skills necessary to create meaningful reports and visual representations of data that are easy to understand and give useful meaning to the data. Properly designed visualizations serve as the basis for well-informed business decisions and projections.

Duration: Instructor-led, group-paced, classroom-delivery learning model with structured hands on activities – 14 hours (2 days)

Course Objectives: Create well-designed reports and dashboards in Excel to visualize data and trends to expedite business decisions in a timely and well-informed manner.

Upon successful completion of this course, students will be able to:

- Develop an Excel report from idea to finished product
- Create and customize basic charts
- Explore the Excel chart library and learn the purpose and best use of popular Excel chart types
- Learn how to create KPI (Key Performance Indicator) dashboards
- Add interactivity to charts without writing VBA code
- Create non-standard Excel charts
- Create pivot table-based reports for reliable, fast reports

Target Student: This course is designed for business professionals who use Excel to create dashboards and reports. Whether you're a fulltime data analyst or an Excel user who would like to improve the design and readability of your existing Excel reports, this class will assist in the development of clear, concise, and valuable reports.

Prerequisites: Before taking this course, students should be familiar with the Excel interface and have the skills to enter data, create tables of information, and write simple formulas. The course is performed using Excel 2016, but the skills obtained are transferrable to earlier and later versions of Excel.

Course Outline	
Dashboard and Report Fundamentals <ul style="list-style-type: none">• Defining the purpose and proper messaging• Typical dashboard data• Identifying report and dashboard audience types Report Design Principles <ul style="list-style-type: none">• Characteristics of a well-designed dashboard• Key goals in the visual design process• Organizing information to support meaning• Making a report visually appealing Acquiring Data and Proper Structuring of Data <ul style="list-style-type: none">• Collecting data from various sources<ul style="list-style-type: none">○ Databases○ Excel tables○ Delimited files○ Web sources• Ensuring proper data type settings	Avoiding Common Dashboard Mistakes Form Controls and Interactivity <ul style="list-style-type: none">• Introduction to form controls<ul style="list-style-type: none">○ Combo boxes, check boxes, spin buttons○ Option buttons, list boxes, scroll bars Dashboard Setup <ul style="list-style-type: none">• Constructing the Data Model• Setting up the Calculations sheet• Building the Visualization sheet