

## Course Description

This course is designed for students who want to extract actionable organizational intelligence from your raw data and present it in a visual format that enables decision-makers to view key trends and conclusions at a glance.

## Learning Objectives

- Create range names and advanced formulas
- Automate workbook functionality
- Apply conditional logic
- Visualize data by creating basic charts
- Create trendline and sparkline charts
- Use PivotTables, PivotCharts, and slicers to create a dashboard

### Using Names in Formulas and Functions

- Examine Dashboards
  - Dashboards
  - Source Data
  - Dashboard Design Considerations
- Use Range Names in Formulas
  - Cell and Range Names
  - Names and the Name Box
  - The New Name Dialog Box
  - The Create from Selection Command
  - The Name Manager Dialog Box
  - The Use in Formula Command Method
  - The Formula AutoComplete Method
- Use Specialized Functions
  - Function Categories
  - The Excel Function Reference
  - Comparison Operators
  - Function Syntax
  - Logical Functions
  - Logical Values
  - The IF Function

### Automating Workbook Functionality

- Apply Data Validation
  - Data Validation
  - Data Validation Criteria
  - Input Messages
  - Error Alerts
- Work with Forms and Controls
  - Forms
  - Form Types
  - Form Controls
  - ActiveX Controls
  - Control Properties

### Applying Conditional Logic

- Use Lookup Functions
  - The LOOKUP Function
  - The VLOOKUP Function
  - The HLOOKUP Function
  - The MATCH Function
  - The INDEX Function
  - The TRANSPOSE Function
- Combine Functions
  - Nested Functions
  - Nested Function Syntax
  - Guidelines for Combining Functions

### Using Advanced Charting Techniques

- Create Dual-Axis Charts and Trendlines
  - Dual-Axis Charts
  - Trendlines
  - Trendline Types
  - The Format Trendline Task Pane
- Create Sparklines
  - Sparklines
  - Sparkline Types

### Visualizing Data with Basic Charts

- Create Charts
  - Charts
  - Chart Basics
  - Chart Types
  - Chart Insertion Methods
  - The Insert Chart Dialog Box
  - Recommended Charts
- Modify and Format Charts
  - Chart Modification
  - Chart Elements
  - Guidelines for Using Chart Elements
  - The Chart Tools Contextual Tab
  - The Format Task Pane
  - The Chart Tools Buttons
  - The Select Data Source Dialog Box

### Analyzing Data with PivotTables, PivotCharts, and Slicers

- Create a PivotTable
  - Pivoting
  - PivotTables
  - Transactional Data
  - PivotTable Creation
  - The PivotTable Field Task Pane
- Analyze PivotTable Data
  - Start with Questions, End with Structure
  - The PivotTable Tools Contextual Tab
  - The Value Field Settings Dialog Box
  - Summarize and Show Combinations
- Present Data with PivotCharts
  - PivotCharts
  - The PivotCharts Fields Task Pane
  - PivotChart Filters
- Filter Data by Using Slicers
  - Slicers
  - The Report Connections Dialog Box
  - Timelines
  - The Timeline Tools Contextual Tab