Course Objectives and Outline

Excel 2016: Advanced

Days: 1   **Prerequisites or Equivalent Skills:** Windows and Excel Intermediate

Target Student and Goals:

Before taking this course, you should be comfortable using a personal computer and Microsoft Windows. You should have some experience with Excel and should be familiar with intermediate-level tasks, such as sorting data, linking worksheets, and outlining and consolidating data. You will get the most out of this course if their goal is to become proficient in performing advanced tasks, such as using logical, statistical, financial, and date functions, working with data tables, validating cell entries and using advanced filters, creating advanced charts, working with PivotTables and PivotCharts, exporting and importing data, performing what-if analyses, and recording macros.

Course Objectives:

These overall course objectives will give you an idea about what to expect from the course. After completing this course, you will know how to:

- Use the IF and IFERROR functions to calculate a value based on specified criteria; use conditional functions to summarize data; use text functions to extract data strings; use date functions to calculate duration in years, months, and days; create array formulas to perform multiple calculations on multiple sets of data at one time; and change calculation options and iteration limits.

- Use the VLOOKUP function to find values in worksheet data; and use data tables to project values.

- Use the Data Validation feature to validate data entered in cells; and use advanced filter options to display the data you specify.

- Format data points in charts; create combination charts and trendlines; insert sparklines; use chart templates; and add and modify drawing objects and shapes.

- Create a PivotTable for analyzing and comparing large amounts of data; modify the PivotTable view by using slicers to filter data and by rearranging fields; improve the appearance of a PivotTable by changing its field settings and applying a style; and create a PivotChart to graphically display data from a PivotTable.

- Export data from Excel to other formats, and import data from a text file into an Excel workbook; and use Microsoft Query and the Web query feature to import data from external databases.

- Use the Goal Seek utility to meet a target output for a formula by adjusting the values in the input cells; and create scenarios to save various sets of input values that produce different results.

- Run a macro to perform tasks automatically; record macros; assign a macro to a button in the worksheet; edit a macro by editing VBA code.

Course Outline:

Unit 1 : Logical and Math functions

- Logical functions (IF)
- Nested Functions (OR, AND, NOT)
- SUMIF function
- ROUND Function
- Text functions

Unit 2 : Lookups and data tables

- Lookup functions (VLOOKUP)
- Data tables

Unit 3 : Advanced data management

- Validating cell entries
- Exploring database functions

Unit 4 : Advanced Charting

- Chart formatting options
- Combination charts
- Graphical objects

Unit 5 : PivotTables and Pivot Charts

- Working with PivotTables
- Rearranging PivotTables
- Formatting PivotTables
- Using PivotCharts

Unit 6 : Exporting and Importing

- Exporting data
- Importing data
- Querying external databases

Unit 7 : Analytical options

- Goal Seek and Solver
- Scenarios
- Views
- Reports

Unit 8 : Macros

- Recording and running a macro
- Editing VBA code