

## Course Overview:

Now that you have been working with the advanced features in Microsoft Excel, you are ready to take your skills to the next level. This course will focus especially on Excel formulas and functions and how to create an efficient and well-designed spreadsheet.

**Note:** Knowledge and experience using Microsoft Excel at the Intermediate/Advanced course is a prerequisite for this course.

## Course Content:

### Create a Well Designed Spreadsheet

- Creating efficient formulas using formula operators, order of precedence, relative, absolute and mixed cell references.
- Using range name in formulas.
- Combining the Conditional Formatting command with the ISBLANK AND ISERROR functions.

### Logical Functions

- Nesting or combining the AND and OR function in the IF function.

### Text Functions

- Converting the case of text from lowercase to uppercase or proper case, joining several strings of text from two or more cells and extracting data from a cell. Also, using the Text to Columns command to separate data into multiple columns.
- Using the new Flash Fill feature to extract the first name from a list.

### Date and Time Functions

- Subtracting dates using the DATEDIF function and calculating the difference between two times; using the YEAR, MONTH and DAY functions and quickly generating different date series.

### Statistical Functions

- Correctly using the AVERAGEA and COUNTA function.
- Using the new COUNTIFS function.

### Lookup and Reference Functions

- Learning when to use the VLOOKUP, HLOOKUP, CHOOSE, LOOKUP, MATCH and OFFSET functions to look up data.

### Database Functions

- Using database functions to extract information from a database without rearranging the data. For example use, DSUM, DAVERAGE, DCOUNT, DMAX and DMIN.

### Math & Trig Functions

- Learning when to use the ROUND, ROUNDUP, ROUNDDOWN, CEILING or FLOOR function.
- Using the SUMIF and SUMIFS function, based on one or more criteria.

### Financial Functions

- Using the PMT function to calculate the payment of a loan.

### Data Validation

- Restricting the data that may be entered into a cell by combining the Data Validation command with formulas.

### Pivot Tables

- Adding calculated fields to a pivot table and using a dynamic range and that will expand or collapse as required within a pivot table.
- Using the new Recommended Pivot Table command to quickly create a meaningful Pivot Table.
- Creating a new Timeline for a Pivot Table.

### Quick Analysis Tool

- Using the new Quick Analysis tool to simplify tasks: Formatting, Formulas, charts and more.