Mastering Microsoft Office Excel

Duration : 3 Days

Course Content

Get a head start in acquiring the knowledge of using Formulas in your daily work as well as expand your Microsoft Excel knowledge. This course will empower you to have answers to excel question at your fingertip. There a numerous and a varied number of new tips you will learn irrespective of the Excel version used. This course will serve as a refresher as well as a reference. The course is for users at all levels, from beginners through intermediate and advanced.

This course also provides students with the knowledge and skills to write basic Excel lookup formulas as well as in depth nesting of advanced array and reference functions. The purpose of the course is not only to show that certain functions exist and how they look like, but to show the diversity and usefulness of those functions. This is a very hands-on approach with constant examples, practices and problem solving provided to the audience.

This course provides students with the knowledge and skills to use advanced features in creating and analyzing databases. Students will learn how to sort and manage data in lists; filter and query data; apply lookup and database functions. Students will also learn how to analyze and evaluate the information in databases by create and work with Pivot Tables in a variety of ways. Discover how to perform a variety of calculations with Pivot Table Data. Pivot Table – a great analysis tool!

Prerequisites

An intermediate usage of Microsoft Office Excel for at least 1 year.

Course Objectives

After completing this course, students will be able to:

- Apply Formula and Functions Basic
- Statistical and Logical Functions
- Text Formulas
- Date and Time Formulas
- Array and Database Functions
- Efficiency Tips
- List LOOKUP function in Excel.
- Recognize the opportunities for LOOKUP function use.

- Decide which lookup function is best in the given scenario.
- Mastering Microsoft Office Excel
- Always keep in mind a wide range of functions and have the ability to combine their use.
- Working with Databases
- Using AutoFilter
- Working with Advanced Filters
- Lookup Formulas
- Exporting and Importing Data
- Creating/Revising PivotTable

Who Should Attend

This course is intended for both novice and experienced information worker who have the understanding and knowledge of basic Excel formulas and functions. A minimum one year experience with Excel is recommended before attending.

Course Outline

Day 1

Module 1: Making Data Work for You

This module explains how to understand and apply Excel basic formulas and functions. Lessons :

- Formula basics
- Using cell references
- Copy formula without changing cell reference
- Transpose formula
- Using nested functions

Lab 1: Making Data Work for You

- Formula basics
- Using cell references
- Copy formula without changing cell reference
- Transpose formula
- Using nested functions

Module 2: Statistical and Logical Functions

This module explains how to use logical functions including CountIf, Sumif, If, IsError. Lessons :

- Perform calculation using CountIF
- Perform calculation using SumIF
- Perform calculation using AverageA
- Using IF function to prevent division by zero
- Using IsError function to avoid error display
- Creating multiple conditions using nested IF
- Using logical function OR, And

Lab 1: Statistical and Logical Functions

- Perform calculation using CountIf, SumIf, AverageA
- Using If function to prevent division by zero
- Using IsError function to avoid error display
- Create multiple conditions using nested IF
- Using logical function OR, AND

Module 3: Introducing LOOKUP functions

In this module students are shown a variety of lookup function and examples where lookup functions are needed. The basic knowledge given here is then extended throughout the course. The whole spectrum of functions that are explained in detail in future Modules are introduced here. Lessons :

- Example by using the IF function
- Which LOOKUP functions are at our disposal
- Other functions we will use during this course
- What knowledge should we possess before moving on

After completing this module, students will be able to:

- What are we trying to accomplish.
- Why should we use LOOKUP functions?
- What LOOKUP functions are at my disposal?
- Which reference functions should I know?
- Which Array functions should I know?
- Recognize the situations where lookup functions are used.

Module 4: The LOOKUP Functions Basics

In the course of this module, all lookup functions will be introduced step by step. With the knowledge of the syntax, we will examine examples of use and then test our knowledge in Lab 1. Lessons :

- LOOKUOP function
- VLOOKUP function

- HLOOKUP function

Lab: LOOKUP function

- Practice 1: the use of LOOKUP function and both its syntaxes.
- Practice 2: practice with many tricks of use and providing a deeper understanding LOOKUP function.

Lab: VLOOKUP function

- Practice 3: the use of VLOOKUP functions final argument.
- Practice 4: Tricks of using TRUE as the final argument and IFERROR function to prevent the #N/A error.

Lab: HLOOKUP function

- Practice 5: the use of HLOOKUP function and comparison to the VLOOKUP function.
- Practice 6: The use of IF and LEN functions to avoid a “zero” value when the cell we lookup is empty.

After completing this module, students will be able to:

- Recognize a LOOKUP function syntax.
- Recognize situations when we use the LOOKUP function.
- List how does LOOKUP differ from other lookup functions.
- Recognize a VLOOKUP function syntax.
- Recognize what kinds of examples are solved using VLOOKUP function.
- List all differences from other lookup functions.
- Recognize a HLOOKUP function syntax.
- Tell when to use HLOOKUP.

Module 5: Advanced LOOKUP examples with function nesting

This module will be instructor led example by example upgrading of lookup functions with other functions and data validation. Each function will be followed by practices. Also array functions and their use will be mentioned.
Lessons :

- MATCH function
- How can we use MATCH with VLOOKUP
- INDEX function
- Combining MATCH and INDEX functions
- INDIRECT function
- CHOOSE function

- CELL function
- OFFSET function
- ROW and COLUMN functions

After completing this module, students will be able to:

- Enhance lookup formulas with many new functions and tools.
- Recognize the need for MATCH function.
- Face any situation where lookup functions are required at their daily faceoff with Excel.

Module 6: Text Formulas

This module explains how to apply Text formula to help change casing of text, append text and numerical value in excel spreadsheet. Lessons :

- Changing case of text
- Append text and numerical value
- Convert imported text format into numbers
- Break imported date field into individual columns

Lab 1: Text Formulas

- Changing case of text using Upper, Lower or Proper formula
- Append text and numerical value

DAY 2

Module 7: Date and Time Formulas

This module explains how to make use of calculate the difference of two given Date fields and to perform calculation with Time fields. Lessons :

- Perform addition to Date fields
- Calculate difference between two Dates
- Perform calculations with Time fields
- Copying a Table from a Web Page

Lab 1: Exporting and Importing Data

- Perform addition and calculate difference between two dates
- Perform calculations with Time fields

Module 8: Array and Database Functions

This module explains how to apply and use advance formula including Array, Frequency and Database functions. Lessons :

- Using Array Formulas
- Calculate the difference between Maximum and Minimum values
- Using Frequency function to Count responses
- Using Database functions DSum and DCount

Lab 1: Array and Database Functions

- Using Array Formulas
- Calculate the difference between Maximum and Minimum values
- Using Frequency function to Count responses
- Using Database functions DSum and Dcount

Module 9: Efficiency Tips

This module discusses some useful Excel Tips including application of Data Validations and Auditing Tools. Lessons :

- Shortening worksheets names
- Protecting cells containing formulas
- Using Data Validation
- Displaying Formula syntax
- Using Auditing Tools for errors checking
- Tracing precedent and dependent
- Adding comments to worksheet

Lab 1: Efficiency Tips

- Understand the advantages of shortening worksheet names
- Protecting cells from amendments by others
- Using Data validation to improve data entries
- Using Auditing Tools for checking errors
- Adding useful notes by commenting worksheet

Module 10: Working with Databases

This module explains how to make use of Excel to create a sample database format. Lessons :

- Creating a Database
- Modifying a Database
- Sorting Records by Multiple Fields
- Using Data Validation
- Validating Data using a List
- Creating a Custom Error Message
- Removing Data Validation

- Creating Subtotals in a List
- Removing Subtotals from a List

Lab 1: Working with Databases

- Creating and Modify Database
- Using Data Validation
- Creating, Removing Subtotals

After completing this module, students will be able to:

- Creating and Modify Database
- Using Data Validation
- Creating, Removing Subtotals

Module 11: Using AutoFilter

This module explains how to use AutoFilter to get their desired details from Excel List. Lessons :

- Enabling AutoFilter
- Using AutoFilter to Filter a List
- Clearing AutoFilter Criteria
- Creating a Custom AutoFilter

Lab 1: Using AutoFilter

- Enabling AutoFilter
- Using AutoFilter to Filter a List
- Clearing AutoFilter Criteria
- Creating a Custom AutoFilter

After completing this module, students will be able to:

- Use AutoFilter to get their desired details from Excel list.
- Create Custom AutoFilter

Module 12: Working with Advanced Filters

This module explains how to make use of the advanced filter to set criteria range and copy the result to another location in Excel ranges. Lessons :

- Creating a
- Using a
- Showing All Records
- Using an Advanced and Condition
- Using an Advanced or Condition

- Copying Filtered Records
- Using Database Functions

Lab 1: Working with Advanced Filters

- Set Criteria range for the advanced filters.
- Copying Filtered record to another location in Excel ranges.
- Use Database function for calculating required results.

After completing this module, students will be able to:

- Set Criteria range for the advanced filters.
- Copying Filtered record to another location in Excel ranges
- Use Database function for calculating required results
- Resolve common application compatibility issues

DAY 3

Module 13: Exporting and Importing Data

This module explains how to import and export Excel data to text formats. It also shows how to import data from the web. Lessons :

- Exporting Data to Other Applications
- Exporting to XML
- Importing Data from Text Files
- Changing Properties
- Importing Data from Other Applications
- Removing the Query Definition
- Importing Dynamic Data from the Web
- Copying a Table from a Web Page

Lab 1: Exporting and Importing Data

- Import and export data to Text format
- Import data from other applications
- Import data from the Web

Module 14: Manipulating the PivotTable

This module explains how to rearrange the layout of the PivotTable. Lessons :

- Rearranging the Layout
- Adding New Field
- Renaming a Field
- Formatting Numbers

- Changing Sorting Order
- Showing Top 10
- Refreshing Data

Lab 1: Manipulating the PivotTable

- Rearranging the Layout
- Adding New Field
- Renaming a Field
- Formatting Numbers
- Changing Sorting Order

Module 15: Digging Deeper

This module explains how to group item, display subtotals and grand totals within the PivotTable. Lessons :

- Grouping Items
- Displaying Subtotals
- Hiding/Showing Grand Totals
- Formatting PivotTable
- Using Slicer
- Formatting Slicer

Lab 1: Digging Deeper

- Grouping Items
- Displaying Subtotals
- Hiding/Showing Grand Totals
- Formatting PivotTable

After completing this module, students will be able to:

- Display grouping and subtotals for PivotTable
- Formatting PivotTable
- Organize PivotTable through the use of Slicer

Module 16: Beyond the Basics

This module explains how to create a second data field and changing the summary function with the PivotTable. Lessons :

- Creating Second Data Field
- Changing the Summary Function
- Displaying Numerical Value as a Percentage of the Total
- Creating a Custom Calculation

- More Function in Custom Calculation

Lab 1: Beyond the Basics

- Create a Second Data Field within the PivotTable
- Changing Summary Function
- Displaying Numerical Value as a Percentage of the Total
- Creating a Custom Calculation
- More Function in Custom Calculation

After completing this module, students will be able to:

- Create a Second Data Field within the PivotTable
- Changing Summary Function
- Displaying Numerical Value as a Percentage of the Total
- Create custom calculation within the PivotTable

Module 17: More PivotTable Calculations

This module explains how to insert formula within the PivotTable. Lessons :

- Using Formulas
- Creating a Calculated Field
- Creating a Calculated Item
- Using GetPivotData Function
- Turn off GetPivotData Function

Lab 1: More PivotTable Calculations

- Use Formulas with the PivotTable
- Create a calculated field and item
- Using GetPivotData Function
- Turn off GetPivotData Function

After completing this module, students will be able to:

- Use Formulas with the PivotTable
- Create a calculated field and item
- Using GetPivotData Function
- Turn off GetPivotData Function

Module 18: Optional Topics

This module how to create a PivotChart, Publishing PivotTable to the Web and using multiple source range for the PivotTable. Lessons :

- Creating PivotChart

- Publishing PivotTable to the Web
- Using Multiple Source Ranges

Lab 1: Optional Topics

- Creating PivotChart and Publishing PivotTable to the Web
- Using Multiple Source Ranges to create PivotTable