Mastering Microsoft Excel for Business:

Advanced Level Course with Power Pivot & Power Query

INTRODUCTION

Microsoft Excel has the ability to perform advanced calculations and functions, 'advanced' analysis, record macros and integrate with other office applications. During this course participants will learn how to use macros to automate every day tasks. Additionally, they will also learn how to protect and validate spreadsheets to make it easier for other people to use.

During this course you will learn how to use macros to automate every day tasks. You will also learn how to protect and validate your spreadsheets to make it easier for other people to use.

Additionally, in this Power Pivot training, you will start by learning how to get data and transform it into useful tables using Power Query. Then you will learn how to build a proper dimensional model in Excel, by linking multiple tables together in order to solve common real-world problems.
You will also learn to write your own custom calculations for pivot tables using DAX (Data Analysis Expressions), Power Pivot's formula language.

Lastly in the Power Query course, you will learn the BI (Business Intelligence) process of importing data, appending and merging tables, conditional logic, data transformation, and organization.

LEARNING OUTCOME:

Successful completion of the program will enhance the skills and knowledge of participants and enable them to:-

- Record Macros
- Edit VBA code
- Use data validation
- Secure worksheets
- Enabling Power Pivot and Power Query
- An overview of the business intelligence (BI) process
- Pivot table skill review
- Getting data from databases, tables, and ranges
- Data modeling techniques
- Creating a Power Pivot table and linking tables
- DAX training to build measures and write custom calculations
- Design best practices for stability
- Review the process used to develop and update modern business intelligence solutions in Excel
- Learn how to consolidate data from databases and external Excel files
- Explore the seven ways to merge data
- Build your own conditional formulae
- Learn how to pivot and unpivot your data
- Use tools to audit your modules

KEY CONTENTS

Module 1: Importing and Exporting Data with Microsoft Excel 2019

- Importing External Data into Excel
- Importing Text Data into Excel
- Converting Text to columns
- Removing Duplicate Rows of Data
- Importing Data from a Database
- Linking to another File
- Linking and Embedding Objects
- Exporting Data from Excel
- Publishing Worksheets and Workbooks to the Web
- Creating Web Queries

Module 2: Formatting Numbers

- Creating Custom Number Formats
- Using Conditional Formatting
- Applying Conditional Formatting based on Top/Bottom Rules
- Applying Specialised Conditional Formatting
- Creating your own Formatting Rules
- Managing Conditional Formatting
- Clearing Conditional Formatting

Module 3: Working with Macros

- Creating a Macro
- Running a Macro
- Editing a Macro
- Saving a Workbook with Macros
- Opening a Workbook with Macros
- Adding a Macro to the Quick Access Toolbar

Module 4: Summarising Data

- Adding Subtotals to a List
- Nesting Subtotals
- Applying Advanced Filters
- Adding Group and Outline Criteria to Ranges
- Using Data Validation
- Previewing Data using Quick Analysis

Module 5: Analysing your Data

- Using Goal Seek
- Using Solver
- Creating and Displaying Scenarios
- Using Data Tables
- Forecasting Future Values

Module 6: Workgroup Collaboration

- Locking / Unlocking Cells in a Worksheets
- Protecting a Worksheet
- Showing or Hiding Formulas
- Protecting a Workbook

- Encrypting a Workbook
- Marking a Workbook as Final
- Inspecting Workbooks
- Checking Document Compatibility
- Checking Document Accessibility
- Sharing and Co-Authoring an Excel Workbook

Module 7: What is Power Pivot?

- The Need for Power Pivot
- Acquiring Power Pivot and Power Query
- The BI Process Overview
- A Sneak Peek at Your Future

Module 8: Pivot Table Skill Review

- Creating Basic (non-Power) Pivot Tables
- PivotTable Formatting
- PivotTable Filtering Tools & Techniques

Module 9: Getting Data for Power Pivot

- Facts vs Dimensions
- Getting Data from Databases
- Managing Power Queries
- Getting Data from Excel Tables
- Getting Data from Excel Ranges

Module 10: Data Modelling Techniques

- Creating a Power PivotTable
- Key Concepts for Relating Data
- Linking Tables with One-To-Many Joins
- Solving Many-To-Many Joins with Composite Keys
- Solving Many-To-Many Joins with Bridge Tables
- Creating Dynamic Calendars
- Sorting Data Model Fields

Module 11: Building Measures with DAX (Power Pivot's Formula Language)

- Basic Measures – Theory
- Basic Measures – Application
- Understanding Measure Calculation
- Performing Math with Compound Measures
- The CALCULATE() Function
- The ALL() Function
- Time Intelligence Measures

Module 12: Performance Considerations

- The Case for Current
- Performance and Stability: Design Best Practices

Module 13: What is Power Query?

- What is Power Query and What Does it Do?
- Acquiring and Updating Power Query

Module 14: The "BI" (Business Intelligence) Process

- Overview of the BI Process
- Getting Basic Data
- Creating PivotTables
- The Value is in the Refresh

Module 15: Importing Data

- Understanding Dates and Locale
- Getting Data from Text Files
- Getting Data from Excel Tables
- Getting Data from Excel Ranges
- Getting Data from External Excel Files
- Getting Data from Databases

Module 16: Appending Tables (Joining Tables by Stacking Them Vertically)

- Appending Tables Manually
- Append All Files in a Folder – Theory
- Append All Files in a Folder – Preparation
- Append All Files in a Folder – Application
- Append Objects Within the Current Excel Workbook
- Append Objects in an External Excel Workbook

Module 17: Merging Tables (Joining Tables Horizontally by Matching Data)

- 7 Ways to Merge Your Data
- Basic (Left Outer) Joins
- Outer and Inner Joins
- Anti Joins

Module 18: Conditional Logic

- Basic Conditional Logic
- Writing Your Own Conditional Formulae
- Solving Logic Problems Using Errors
- Create Columns from Examples

Module 19: Data Transformation

- Unpivoting Data
- Unpivoting Subcategorized Data
- Pivoting Data
- Pivoting Stacked Data
- Grouping Data

Module 20: Staying Organized

- Grouping Queries
- Viewing Query Dependencies

AUDIENCE

This course is designed for Officers, Executives, Supervisors, Administrators, Managers of all Levels.

METHODOLOGY

28 hours of Self-Paced e-Learning (Online TALENT LMS) - Audio, video, reading material, YouTube video and worksheets.