Intermediate Microsoft Excel

Duration: 8 hours Course

Course Overview: In this course you will learn advance skill like advanced formulas, lists, and illustrations. You will also work with charts and advanced formatting including styles.
Target Audience: This course is intended for students who have basic skills with Microsoft Excel 2019 who want to learn intermediate-level skills or students who want to learn the topics covered in this course in the 2019 interface.

Course Outline

Module1

Lessons

- Using Named Ranges in Formulas
- Using Formulas That Span Multiple Worksheets
- Entering a Formula Using Data in Multiple Worksheets
- Using the IF Function
- Using the PMT Function
- Using the LOOKUP Function
- Using the VLOOKUP Function
- Using the CONCAT   tion

Function

- Using the TRANSPOSE Function
- Using the PROPER, UPPER, and LOWER Functions
- Using the PROPER Function
- Using the LEFT, RIGHT, and MID Functions
- Using the LEFT and RIGHT Functions
- Using Date Functions
- Using the YEAR, MONTH, and DAY Functions

Creating Scenarios

Lab : Advanced Formulas Exercises

- Using Named Ranges in Formulas
- Entering a Formula Using Data in Multiple Worksheets
- Using the IF Function
- Using the PMT Function
- Using the VLOOKUP Function
- Using the CONCAT Function
- Using the PROPER Function
- Using the LEFT and RIGHT Functions
- Using the YEAR, MONTH, and DAY Functions

After completing this module, students will be able to:

- Name and label cells and ranges of cells.
- Use names and labels in formulas.
- Create formulas that span multiple worksheets.
- Use the conditional IF function and its variants in formulas.
- Use the PMT function to calculate payments for loans.
- Use the LOOKUP function.
- Use the VLOOKUP function.
- Use the HLOOKUP function.
- Use the CONCAT function to join the contents of numerous cells.
- Use the TRANSPOSE function.
- Use the PROPER, UPPER, and LOWER functions to alter the casing of text.
- Use the LEFT, RIGHT, and MID functions to return characters from the start or end of a string, or a specific number of text characters.
- Use various date functions.

Module 2: Working with Lists

his module explains how to work with lists.

Lessons

- Converting a List to a Table
- Removing Duplicates from a List
- Sorting Data in a List
- Filtering Data in a List
- Adding Subtotals to a List

Lab : Work with Lists Exercises
- Converting a List to a Table
- Removing Duplicates from a List
- Sorting Data in a List
- Filtering Data in a List
- Adding Subtotals to a List

After completing this module, students will be able to:

- Convert data into tables.

- **Remove duplicates from tables.**
- **Sort data in Excel.**
- **Filter data in Excel.**
- **Use subtotals to automatically total related data.**
- **Group and ungroup data.**

Module 3: Working with Illustrations

This module explains how to work with Illustrations in Microsoft Excel.

Lessons

- **Working with Clip Art**
- **Using Shapes**
- **Adding Shapes**
- **Working with Icons**
- **Working with SmartArt**
- **Using Office Ink**

Lab : Working with Illustrations Exercises

- **Working with Clip Art**
- **Adding Shapes**

After completing this module, students will be able to:

- **Add pictures to your worksheets.**
- **Use Clip Art to illustrate your worksheets.**
- **Insert shapes into Microsoft Excel worksheets. Use SmartArt to illustrate your worksheets.**

Module 4: Visualizing Your Data

his module explains how to work with various types of charts in Microsoft Excel.

Lessons

- **Inserting Charts**
- **Using the Chart Recommendation Feature**
- **Editing Charts**
- **Using Chart Tools**
- **Using the Quick Analysis Tool**
- **Add and Format Objects**

- **Create a Custom Chart Template**

Lab : Visualizing Your Data Exercises
- **Inserting Charts**
- **Editing Charts**

After completing this module, students will be able to:

- **Create charts that enable you to visualize your data.**
- **Choose what data is displayed in your charts.**
- **Show and hide data labels.**
- **Show and hide the legend.**
- **Show and hide the chart title.**
- **Add a picture or shape to a chart.**
- **Change the way text displays in a chart.**
- **Change the fill color of a chart.**
- **Add and format objects in a worksheet.**
- **Create a custom chart template.**

Module 5: Working with Tables

his module explains how to work with tables in Microsoft Excel.

Lessons

- **Format Data as a Table**
- **Move between Tables and Ranges**
- **Modify Tables**
- **Define Titles**
- **Creating and Modifying a Table in Excel**

Lab : Creating and Modifying a Table in Excel
- **Creating and Modifying a Table in Excel**

After completing this module, students will be able to:

- **Format data in Excel as a table.**
- **Modify Excel tables**

Module 6: Advanced Formatting

This module helps in understanding conditional formatting in Microsoft Excel

- Applying Conditional Formatting
- Using Conditional Formatting
- Working with Styles
- Creating and Modifying Templates

Lab : Advanced Formatting Exercises
- **Using Conditional Formatting**
- **Working with Styles**

After completing this module, students will be able to:

- Use conditional formatting to display cells differently based on their values.
- Quickly format tables using styles.
- Format cells using styles

Advanced Excel with Pivot Tables and Macros

Course Duration: 8 Hours (1 Day)

Overview

The "Advanced Excel with Pivot Tables and Macros" course is designed to enhance the analytical capabilities of learners by teaching them to efficiently manage, analyze, and visualize data using advanced Excel features. Learners will discover how to create and manipulate PivotTables starting from basic creation to sophisticated data exploration techniques. They will delve into the intricacies of PivotTable fields, layout, sorting, and filtering data to derive meaningful insights. The course also covers the dynamic use of tools like slicers and timelines to make reports interactive and engaging. In addition, the course provides a solid introduction to VBA Macros, enabling learners to automate repetitive tasks and customize Excel functionality to suit specific needs. They will learn about recording macros, understanding macro security, editing macros, and assigning macros to controls. This comprehensive training offers practical, hands-on experience that will empower users to leverage the full potential of Excel in their professional roles. PivotTables, data analysis, VBA Macros, and automation are at the heart of this course, providing learners with the skills necessary to become proficient and efficient in handling complex datasets and reporting tasks.

Audience Profile

Koenig Solutions' Advanced Excel with Pivot Tables and Macros course is designed for professionals looking to enhance their data analysis skills, including:

- Data Analysts
- Financial Analysts
- Business Intelligence Professionals
- Project Managers
- Administrative Assistants
- Marketing Analysts
- Sales Managers
- Human Resource Managers
- Accountants
- IT Professionals
- Research Analysts
- Educational Professionals
- Consultants
- Individuals preparing for roles that require advanced Excel skills

Course Syllabus

Module 1: PivotTables – Creation

- Creating a PivotTable from a Data Range
- Adding Fields to a PivotTable
- Creating a PivotTable from a Table
- Creating a PivotTable Using Recommended PivotTables

Module 2: PivotTables – Fields

- Using the PivotTable Fields Task Pane
- Moving the PivotTable Fields Task Pane
- Resizing the PivotTable Fields Task Pane
- Understanding PivotTable Fields

Module 3: PivotTable Layout – Fields and Areas

- Exploring Data with PivotTables
- Summarizing Values in a PivotTable
- Updating a PivotTable
- Creating PivotTable Reports

Module 4: PivotTables – Areas

- Understanding COLUMNS Area
- Understanding VALUES Area
- Understanding FILTERS Area

Module 5: PivotTables – Exploring Data

- Sorting and Filtering Data
- Nesting, Expanding, and Collapsing Fields
- Grouping and Ungrouping Field Values

Module 6: PivotTables – Sorting Data

- Sorting by Fields
- Sorting by Subtotals
- Using Additional Sort Options
- Manually Sorting Data
- Setting Sort Options
- Key Considerations When Sorting PivotTables

Module 7: PivotTables – Filtering Data

- Using Report Filters
- Applying Manual Filters
- Filtering by Text
- Filtering by Values
- Filtering by Dates
- Using the Top 10 Filter
- Using the Timeline Filter
- Clearing Filters
- Filtering Data with Slicers
- Inserting Slicers
- Filtering with Slicers
- Clearing Slicer Filters
- Removing Slicers
- Slicer Tools and Settings
- Configuring Slicer Captions
- Managing Report Connections
- Using the Selection Pane
- Understanding PivotTable Nesting
- Nesting Order of Fields
- Changing the Nesting Order

Module 8: PivotTables – Tools

- Using ANALYZE Commands
- Expanding and Collapsing Fields
- Grouping and Ungrouping Field Values
- Grouping by Date Fields
- Configuring Active Value Field Settings
- Adjusting PivotTable Options

Module 9: PivotTables – Summarizing Values

- Summing Values
- Configuring Value Field Settings
- Calculating % of Grand Total
- Calculating % of Column Total
- Calculating % of Row Total
- Counting Values
- Calculating Averages
- Finding Maximum and Minimum Values

Module 10: PivotTables – Updating Data

- Updating PivotTable Layouts
- Refreshing PivotTable Data
- Changing the Source Data for a PivotTable
- Switching to an External Data Source
- Deleting a PivotTable

Module 11: PivotTable – Reports

- Creating Hierarchies
- Using Report Filters
- Applying Slicers
- Using Timelines in PivotTables
- Utilizing DESIGN Commands
- Managing Grand Totals
- Customizing Report Layouts
- Adding Blank Rows
- Using PivotTable Style Options
- Applying PivotTable Styles
- Applying Conditional Formatting to PivotTables
- Creating Pivot Charts

Module 12: Introduction to VBA Macros

- Recording Macros
- Understanding Macro Security
- Editing Macros
- Assigning Macros to Different Controls

Microsoft Excel - Business Intelligence

Module 1. **Introduction To Power Excel**

- Understanding the "Power Excel" Workflow
- Introduction to Power Query + Power Pivot
- When to use Power Query & Power Pivot

Module 2: Connecting & Transforming Data With Power Query.

- Introduction
- Getting to Know Power Query in Excel
- Exploring Excel's Power Query Editor
- Power Query Data Loading Options
- IMPORTANT: Updating Locale Settings
- Applying Basic Table Transformations with Power Query
- Power Query Demo: Text Tools
- Power Query Demo: Number & Value Tools
- Power Query Demo: Date & Time Tools
- PRO TIP: Creating a Rolling Calendar with Power Query
- Power Query Demo: Generating Index & Conditional Columns
- Power Query Demo: Grouping & Aggregating Records
- Power Query Demo: Pivoting & Unpivoting Data
- Modifying Excel Workbook Queries
- Merging Queries with Power Query
- Appending Queries with Power Query
- Power Query Demo: Connecting to a Folder of Files
- Excel Power Query Best Practices

Module 3: Building Table relationships with Excel Data Model.

- Introduction
- Meet Excel's "Data Model"
- The Data Model Data vs. Diagram View
- Principles of Database Normalization
- Understanding Data Tables vs. Lookup Tables
- Benefits of Relationships vs. Merged Tables
- Creating Table Relationships in Excel's Data Model
- Modifying Data Model Table Relationships
- Managing Active vs. Inactive Table Relationships
- Understanding Relationship Cardinality
- Connecting Multiple Data Tables in the Data Model

- Understanding Filter Flow
- Hiding Fields from Excel Client Tools
- Defining Hierarchies in a Data Model
- Excel Data Model Best Practices

Quiz 3: QUIZ: Building Table Relationships with Excel's Data Model

HOMEWORK: Building Table Relationships with Excel's Data Model

Module 4:

- Creating dashboards with Power Pivot
- Creating dashboards
- Using relational data for database
- Slicers and timelines
- Conditional timelines
- Filter & sorting
- Data validation
- Designing dashboard layouts

Module 5:

Capstone project based on dataset