Excel

Course outline

Module 1: Introduction to Excel

Module 1: Introduction to Excel is an introductory course designed to teach the basics of Microsoft Excel. It covers topics such as creating and formatting worksheets, entering data, using formulas and functions, and creating charts and graphs. This module is perfect for those who are new to Excel and want to learn the basics.

Lessons

- Overview of Excel and its features
- Navigating the Excel interface
- Creating and formatting worksheets
- Working with formulas and functions
- Using charts and graphs
- Working with tables and PivotTables
- Analyzing data with conditional formatting
- Automating tasks with Macros
- Sharing and collaborating on Excel documents
- Troubleshooting and best practices

After completing this module, students will be able to:

- Understand the basic features and functions of Excel
- Create and format basic worksheets and charts
- Utilize formulas and functions to manipulate data
- Analyze data using PivotTables and other advanced features

Module 2: Working with Formulas and Functions

Module 2 of the Excel course focuses on working with formulas and functions. Students will learn how to create and use formulas and functions to perform calculations, analyze data, and create charts and graphs. They will also learn how to use the IF, SUM, AVERAGE, and COUNT functions, as well as how to use the VLOOKUP and HLOOKUP functions. Finally, they will learn how to use the PivotTable feature to summarize and analyze data.

Lessons

- Introduction to Formulas and Functions

- Creating Basic Formulas
- Working with Cell References
- Using Logical Functions
- Working with Text Functions
- Working with Date and Time Functions
- Working with Lookup and Reference Functions
- Working with Math and Statistical Functions
- Working with Financial Functions
- Working with Database Functions
- Troubleshooting Formulas and Functions
- Advanced Formulas and Functions

After completing this module, students will be able to:

- Create and modify formulas to perform calculations on data in a worksheet.
- Utilize functions to perform calculations on data in a worksheet.
- Use the IF, SUMIF, COUNTIF, and VLOOKUP functions to analyze data.
- Create and modify charts to visualize data.

Module 3: Working with Tables and Charts

Module 3 of an Excel course focuses on working with tables and charts. It covers topics such as creating and formatting tables, using formulas and functions to analyze data, and creating charts to visualize data. It also covers advanced topics such as creating dynamic charts and using pivot tables.

Lessons

- Creating and Formatting Tables
- Working with Table Styles
- Inserting and Deleting Table Rows and Columns
- Sorting and Filtering Tables
- Creating and Formatting Charts
- Working with Chart Styles
- Inserting and Deleting Chart Elements
- Modifying Chart Data
- Adding Chart Titles and Labels
- Creating Combination Charts

After completing this module, students will be able to:

- Create and format tables and charts in Excel.
- Utilize data analysis tools such as sorting, filtering, and pivot tables.
- Understand how to use formulas and functions to manipulate data in tables and charts.
- Interpret and present data in a visually appealing way.

Module 4: Working with Pivot Tables

Module 4 of the Excel course focuses on working with Pivot Tables. Students will learn how to create and modify Pivot Tables, use them to analyze data, and create charts and graphs from the data. They will also learn how to use the Pivot Table tools to filter and sort data, and how to use the Pivot Table Wizard to quickly create Pivot Tables.

Lessons

- Creating a Pivot Table
- Modifying a Pivot Table
- Grouping and Ungrouping Data in a Pivot Table
- Sorting and Filtering Data in a Pivot Table
- Calculating Data in a Pivot Table
- Formatting a Pivot Table
- Creating a Pivot Chart
- Modifying a Pivot Chart
- Analyzing Data with Slicers
- Using the Power Pivot Add-in

After completing this module, students will be able to:

- Create and modify pivot tables to summarize data.
- Utilize the various features of pivot tables to analyze data.
- Use the Slicer tool to filter data in pivot tables.
- Create and modify pivot charts to visualize data.

Module 5: Working with Macros and VBA

Module 5 of an Excel course focuses on working with Macros and VBA. It covers topics such as recording and running macros, creating custom functions, and using the Visual Basic Editor to create and modify VBA code. It also covers debugging and error handling techniques. This module is designed to help students become proficient in using Macros and VBA to automate tasks and create powerful solutions in Excel.

Lessons

- Introduction to Macros and VBA
- Recording and Running Macros
- Working with Variables and Data Types
- Working with Loops and Conditional Statements
- Working with Functions and Subroutines
- Debugging and Error Handling
- Working with Forms and User Interfaces
- Working with External Data Sources
- Working with Pivot Tables and Charts
- Working with Macros and VBA in Excel Online

After completing this module, students will be able to:

- Create and modify macros to automate tasks in Excel.
- Utilize Visual Basic for Applications (VBA) to create custom functions and procedures.
- Debug and troubleshoot macros and VBA code.
- Understand the security implications of using macros and VBA in Excel.

Module 6: Working with Data Analysis Tools

Module 6 of the Excel course focuses on working with data analysis tools. Students will learn how to use the various data analysis tools available in Excel, such as PivotTables, PowerPivot, and Power Query. They will also learn how to use the data analysis tools to create meaningful insights from data. Additionally, students will learn how to use the data analysis tools to create charts and graphs to visualize data.

Lessons

- Introduction to Excel Data Analysis Tools
- Using Pivot Tables for Data Analysis
- Working with Excel Functions for Data Analysis
- Creating Charts and Graphs for Data Analysis
- Using Excel Macros for Data Analysis
- Analyzing Data with Excel Solver
- Using Excel Power Query for Data Analysis
- Working with Excel Power Pivot for Data Analysis
- Using Excel Power View for Data Analysis
- Analyzing Data with Excel Dashboards

After completing this module, students will be able to:

- Understand the fundamentals of data analysis and how to use Excel to analyze data.
- Utilize Excel functions and formulas to manipulate data and create meaningful insights.
- Create charts and graphs to visualize data and draw conclusions.
- Develop an understanding of how to use PivotTables and PowerPivot to analyze large datasets.

Module 7: Working with Advanced Excel Features

Module 7 of an Excel course focuses on working with advanced features of the program. Students will learn how to use formulas, functions, and data analysis tools to create complex spreadsheets and reports. They will also learn how to use pivot tables, charts, and other visualizations to present data in a meaningful way. Finally, they will explore how to use macros and automation to streamline their workflow.

Lessons

- Using Conditional Formatting
- Working with Data Validation
- Creating Advanced Formulas
- Working with Pivot Tables
- Using Macros and VBA

- Working with Advanced Charting Techniques
- Working with Lookup Functions
- Working with Text Functions
- Working with Date and Time Functions
- Working with Array Formulas

After completing this module, students will be able to:

- Create and use advanced formulas such as VLOOKUP, INDEX, MATCH, and IFERROR.
- Create and use advanced functions such as SUMIF, COUNTIF, and AVERAGEIF.
- Create and use data tables and pivot tables to analyze data.
- Create and use macros to automate repetitive tasks.

Module 8: Working with Excel Dashboards

Module 8 of an Excel course focuses on working with Excel Dashboards. Students will learn how to create and customize dashboards, use data visualization techniques, and create interactive charts and graphs. They will also learn how to use formulas and functions to analyze data and create reports. Finally, they will learn how to use macros and automation to streamline their workflow.

Lessons

- Introduction to Excel Dashboards
- Creating a Dashboard in Excel
- Designing a Dashboard in Excel
- Working with Charts and Graphs in Excel Dashboards
- Using Pivot Tables in Excel Dashboards
- Working with Filters and Slicers in Excel Dashboards
- Using Macros and VBA in Excel Dashboards
- Best Practices for Excel Dashboards
- Troubleshooting Excel Dashboards
- Sharing and Publishing Excel Dashboards

After completing this module, students will be able to:

- Create interactive dashboards in Excel to visualize data.
- Utilize advanced Excel features such as slicers, timelines, and sparklines to enhance the user experience.
- Understand how to use formulas and functions to create dynamic dashboards.
- Develop an understanding of how to use data visualizations to communicate insights.

Module 9: Working with Excel Add-ins

Module 9 of an Excel course focuses on working with Excel Add-ins. Students will learn how to install and use add-ins to extend the functionality of Excel, as well as how to create their own custom add-ins. They will also explore the various types of add-ins available and how to use them to automate tasks and

increase productivity.

Lessons

- Introduction to Excel Add-ins
- Installing and Managing Excel Add-ins
- Working with Excel Add-ins
- Troubleshooting Excel Add-ins
- Best Practices for Using Excel Add-ins
- Creating Custom Excel Add-ins
- Automating Tasks with Excel Add-ins
- Security Considerations for Excel Add-ins
- Advanced Excel Add-in Features
- Tips and Tricks for Working with Excel Add-ins

After completing this module, students will be able to:

- Understand how to install and use Excel add-ins.
- Be able to create custom functions and macros using Excel add-ins.
- Be able to use the various features of Excel add-ins to automate tasks.
- Be able to troubleshoot and debug Excel add-ins.

Module 10: Working with Excel Online

Module 10 of an Excel course focuses on working with Excel Online. It covers topics such as creating and editing workbooks, formatting cells, using formulas, and creating charts and graphs. It also covers how to collaborate with others on Excel Online and how to share and publish workbooks.

Lessons

- Introduction to Excel Online
- Navigating the Excel Online Interface
- Creating and Editing Spreadsheets in Excel Online
- Working with Formulas and Functions in Excel Online
- Working with Charts and Graphs in Excel Online
- Sharing and Collaborating on Excel Online Spreadsheets
- Managing and Securing Excel Online Spreadsheets
- Troubleshooting Common Issues in Excel Online
- Advanced Excel Online Features
- Best Practices for Working with Excel Online

After completing this module, students will be able to:

- Create and edit spreadsheets in Excel Online.
- Utilize the various features of Excel Online, such as sorting, filtering, and formatting.
- Create charts and graphs in Excel Online.

- Share and collaborate on spreadsheets with other users.

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