

Analyzing Data with Excel

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DN-02 Analyzing Data with Excel

Module 0: About the Course (2 min)

Module 1: Introduction to Data Analysis with Excel (17 min)

- Overview
- Relationships Between Business, Data, and Analysis
 - Business – the Structure
 - Business – the Components
 - Business – the Connectors
 - ... Data!
 - Nature and Characteristics of Data
 - Categories of Data
 - Introduction to Analysis
 - Types of Analysis
 - The Relationships Explained
 - How excel Can Help You
- About Microsoft Excel
 - Microsoft Excel
 - Structure of an Excel Spreadsheet
 - Tabs We Will Use
- Summary

Module 2: Data Acquisition, Preparation, and Organization (24 min)

- Overview
- Introductions and Purpose
 - Getting Data Ready
 - Acquiring Data
 - Preparing Data
 - Organizing Data
- Acquiring Data
 - Entering & Importing Data
 - Entering Data
 - Importing Data
- Preparing Data
 - Overview
 - Copying Your Raw Data
 - Spelling
 - Labeling Data
 - Formatting Data: Introduction and Types
 - Formatting Data: Key Sections
 - Formatting Data: Custom Guide
 - Cleaning Data: Purpose and Inquiries
 - Cleaning Data: Empty values



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- Cleaning Data: Duplicate Values
 - Cleaning Data: Wrapping up
- Organizing Data
 - Overview
 - Table(s) and Sheet(s)
 - Filtering Data
 - Sorting Data
- Tips, Guidelines, and Summary
 - Tips and Guidelines
 - Summary

Module 3: **Formulas, Statistics, and Analysis (25 min)**

- Overview
- Introductions and Purpose
 - Introduction: Using Your Data
 - Purpose
- Basic Formulas and Functions
 - Overview
 - About Formulas
 - Helpful Points
 - Math Formulas
 - Statistical Formulas and Functions
 - Time Series Formulas and Functions
- Advanced Functions
 - Overview
 - Financial Functions
 - Example: Financial Functions
 - Logical Functions
 - Example: Logical Functions
 - Lookup and Reference Functions
 - Example: Lookup and Reference Functions
 - Statistical Functions
 - Example: Statistical Function
- Modeling and Analysis
 - Overview
 - Using Analyze Data
 - Using Data Analysis 1
 - Using Data Analysis 2
 - Using Data Analysis 3
 - Using Forecast Sheet 1
 - Using Forecast Sheet 2
- Tips, Guidelines, and Summary
 - Tips and Guidelines
 - Summary



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Module 4: Visualization (24 min)

- Overview
- Introduction to Visualization
 - What is Data Visualization?
 - Telling a Story
 - Key Components
- The Process
 - Step 1: Identify the Purpose
 - Step 2: Identify the Data
 - Step 3: What are We Analyzing?
 - Step 4: Choose the Visualization
 - Step 5: Presenting the Visualization
- Types of Visualization
 - HOME: Conditional Formatting
 - INSERT: Charts 1
 - INSERT: Charts 2
 - INSERT: Charts 3
 - INSERT: Charts 4
 - INSERT: Charts 5
 - INSERT: Maps
 - INSERT: Sparklines
 - INSERT: PivotChart
- Visualizing the Data
 - Outline
 - Example 1: Conditional Formatting (Part1)
 - Example 1: Conditional Formatting (Part2)
 - Example 2: Charts (Part 1)
 - Example 2: Charts (Part 2)
 - Example 3: Mapping (Part 1)
 - Example 3: Mapping (Part 2)
 - Example 4: PivotChart (Part 1)
 - Example 4: PivotChart (Part 2)
 - Example 5: Sparkline (Part 1)
 - Example 5: Sparkline (Part 2)
- Tips, Guidelines, and Summary
 - Tips and Guidelines
 - Summary

Module 5: Integration and Advanced Features (32 min)

- Overview
- Introduction and Purpose
 - Introduction
 - Purpose



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- Advanced Features
 - Home
 - View
 - Review: Comments and Notes
- Sharing and Access
 - Overview
 - Sharing
 - Access
- Integrations
 - Overview
 - Office Add-ins
 - Microsoft Teams
 - 3D Maps 1
 - 3D Maps 2
 - 3D Maps 3
 - 3D Maps 4
 - Power Query 1
 - Power Query 2
 - Power Query 3
 - Power Query 4
 - Power Query 5
 - Microsoft PowerBI
 - Data Model
 - Power Pivot: Calculations – Measures
 - Power Pivot: Calculations – KPIs
 - Power Pivot: Adding Measures and KPIs
 - Power Pivot: Tables
- Tips, Guidelines, and Summary
 - Tips and Guidelines
 - Summary

Module 6: Using BI with Excel (38 min)

- Overview
- Introduction to BI Tools
 - What is a BI Tool?
 - Importance of Data Analysis
 - Relationships Between Excel and BI Tools
- Exporting Excel Data
 - Export Data to BI Tools
 - Export Data to BI Tools: Tabular
 - Export Data to BI Tools: Formatting
 - Export Data to BI Tools: Cleaning
 - Export Data to BI Tools: Compatibility
- Excel and Power BI
 - About Power BI
 - Components of Power BI
 - How Excel and Power BI Work Together



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- Using Power BI – 1: Power BI Setup
- Using Power BI – 2: Getting Started
- Using Power BI – 3: Preparing Excel Data
- Using Power BI – 4: Importing Excel Data
- Using Power BI – 5: Transform (1)
- Using Power BI – 5: Transform (2)
- Using Power BI – 6: The Dashboard (1)
- Using Power BI – 6: The Dashboard (2)
- Using Power BI – 6: The Dashboard (3)
- Using Power BI – 7: Publish or Share
- Excel and Tableau
 - About Tableau
 - Components of Tableau
 - How Excel and Tableau Work Together
 - Using Tableau – 1: Tableau Setup
 - Using Tableau – 2: Getting Started
 - Using Tableau – 3: Importing Excel Data
 - Using Tableau – 4: Data Source (1)
 - Using Tableau – 4: Data Source (2)
 - Using Tableau – 5: Using Sheets (1)
 - Using Tableau – 5: Using Sheets (2)
 - Using Tableau – 6: The Dashboard (1)
 - Using Tableau – 6: The Dashboard (2)
 - Using Tableau – 6: The Dashboard (3)
 - Using Tableau – 7: Publish or Share
- Tips, Guidelines, and Summary
 - Tips and Guidelines
 - Summary

Module 7: Using Copilot with Excel (21 min)

- Overview
- Introduction to Microsoft Copilot
 - What is Microsoft Copilot?
 - Notes about Microsoft's Copilot
 - Location of Copilot in Excel
- Overview and Features
 - Opening Copilot
 - Copilot Prompt Gallery 1
 - Copilot Prompt Gallery 2
- Prompt Engineering
 - Defining Prompt Engineering
 - Prompt Engineering in Copilot
 - Prompt Engineering in Excel
- Using Copilot in Excel – Part 1
 - Sample Dataset and Opening Copilot
 - Identifying Outliers
 - Identifying Missing Data 1



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- Identifying Missing Data 2
 - Identifying Errors
 - Best Practices for Using Copilot in Excel 1
 - Best Practices for Using Copilot in Excel 2
 - Best Practices for Using Copilot in Excel 3
- Using Copilot in Excel – Part 2
 - Using Copilot in Excel 1: The Purpose
 - Using Copilot in Excel 2: Cleaning the Data
 - Using Copilot in Excel 3: Distribution Study
 - Using Copilot in Excel 4: Identify Factors
 - Using Copilot in Excel 5: Conducting Analysis
- Tips, Guidelines, and Summary
 - Tips and Guidelines
 - Summary