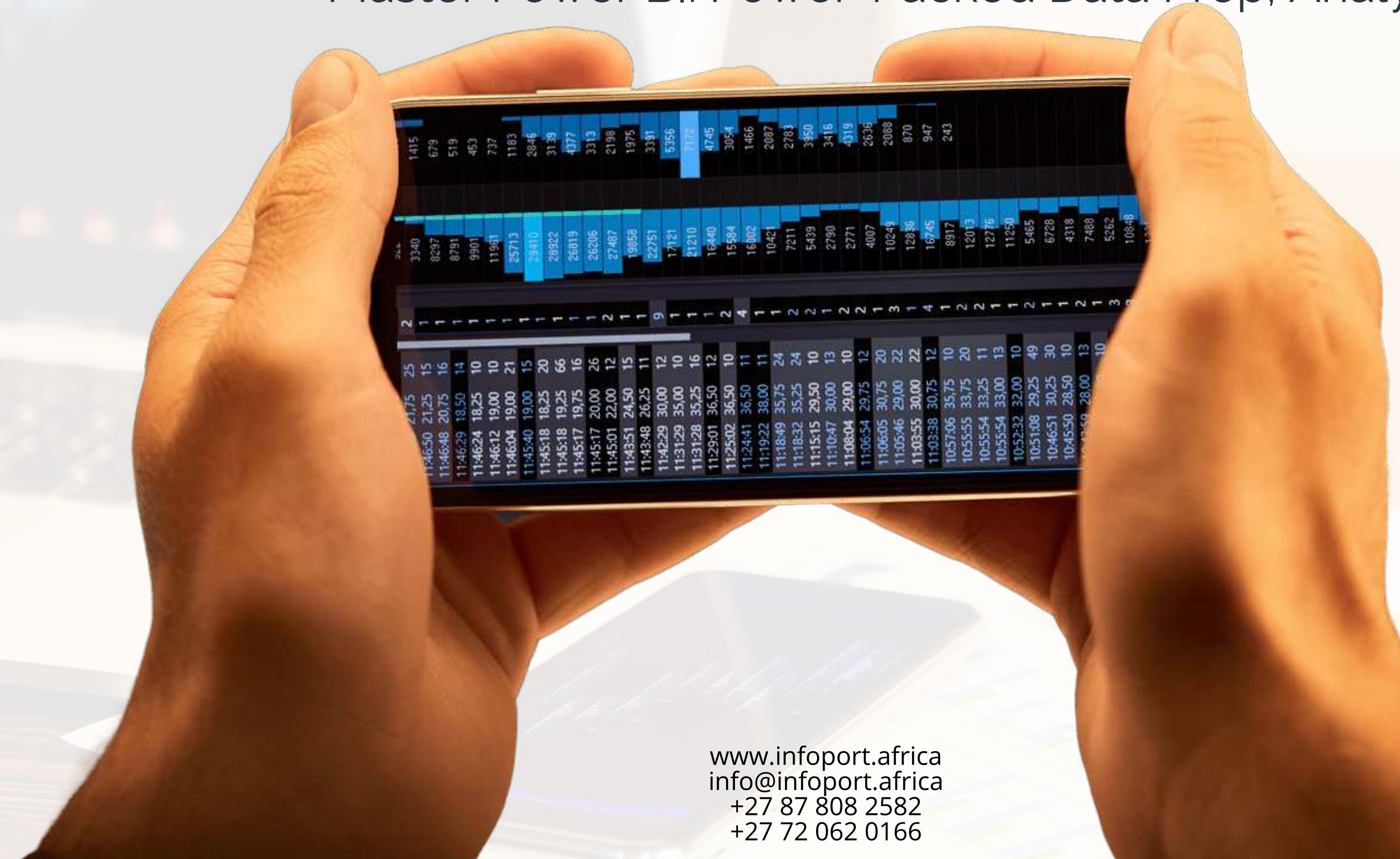


Data Analysis and Data Visualization with Copilot in Microsoft Excel & Microsoft Power BI: Data Analysis & AI Dashboards (2025)



Create and insert Excel formulas, pivot tables, charts etc. and run Python in Excel for advanced analysis using Copilot

Master Power BI: Power-Packed Data Prep, Analysis, Visualization & Dashboard



Online Training:
23-25 July 2025

R 9 999
INC VAT



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Requirements

Basic familiarity with Excel, access to Microsoft 365, a computer with internet, and an eagerness to learn!

What you'll learn

Microsoft Excel and AI
Automate Excel tasks by creating advanced formulas and conditional logic using Copilot
Generate comprehensive Pivot tables and dynamic Pivot charts to simplify data summarization and reporting.
Efficiently organize large datasets by mastering automated sorting, filtering, and conditional formatting
Activate and configure Microsoft Copilot within Excel to optimize your productivity.
Execute predictive analytics directly within Excel using integrated Python scripts facilitated by Copilot.
Conduct detailed text analysis leveraging Python's natural language processing capabilities within Excel.
Design and implement interactive dashboards that blend AI-driven insights with Python visualizations for professional reporting.
Evaluate and optimize data visualizations by critically comparing AI-generated charts with manual creations for clearer business communication.

PowerBI

Learn to turn raw data into powerful insights with our comprehensive Microsoft Power BI course, designed for data professionals and aspiring data analysts. This hands-on training covers every aspect of Power BI, from data transformation and advanced DAX calculations to sophisticated dashboard creation and AI-driven analytics.

Who this course is for:

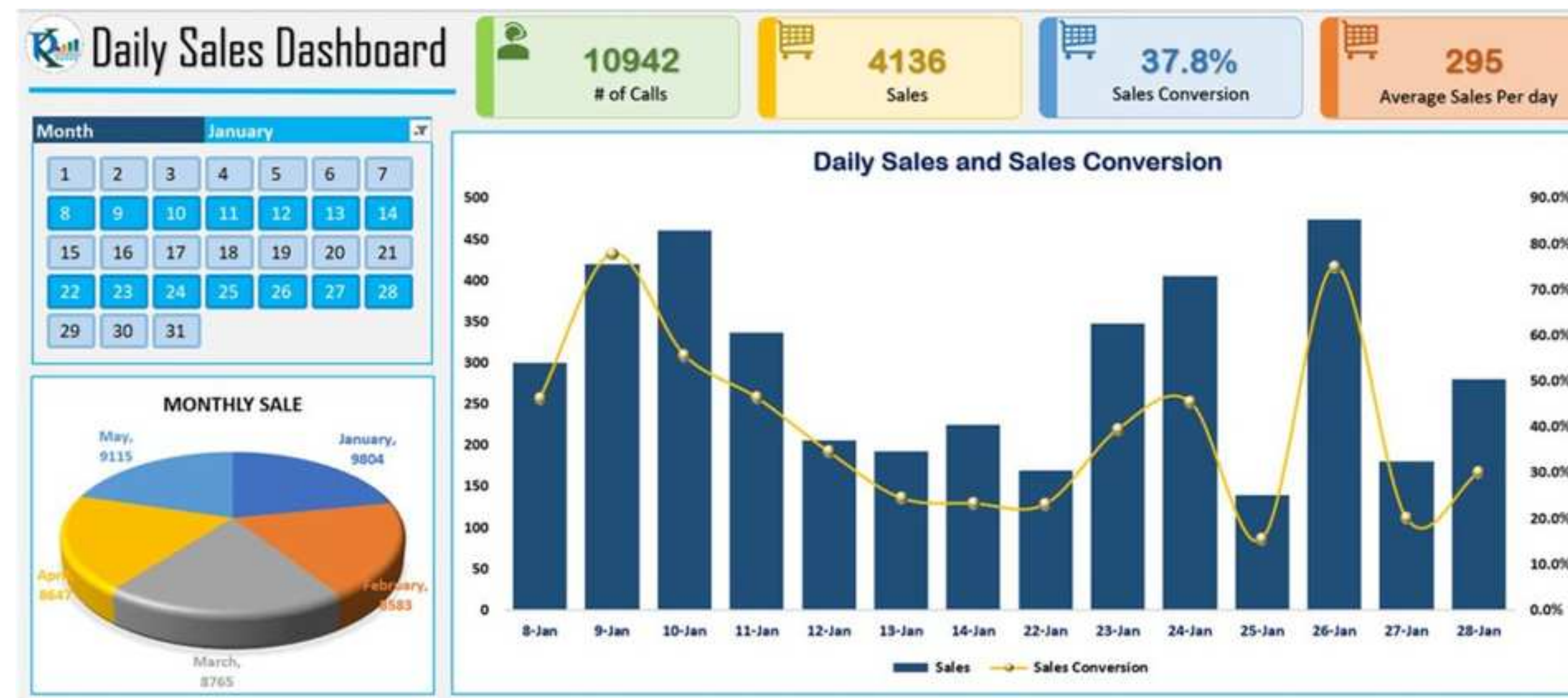
Business Professionals and Analysts who frequently work with large, complex Excel spreadsheets and seek efficient ways to analyze, visualize, and present data-driven insights.

Excel Users and Enthusiasts looking to upgrade their skills by integrating advanced AI-driven tools into their daily workflow.

Data Analysts and Data Scientists aiming to leverage Excel's potential combined with Python to perform predictive analytics, text analysis, and create interactive dashboards.

Managers and Decision-Makers who rely on data visualization for strategic insights and want to streamline reporting and analytical processes.

Professionals familiar with Excel basics who desire to automate repetitive tasks, reduce manual errors, and enhance their analytical capabilities using cutting-edge tools like Microsoft Copilot.



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Description

If you are an Excel user, data analyst, or business professional who spends hours dealing with spreadsheets and manual analysis, imagine having a powerful AI assistant at your fingertips. What if you could automate tedious tasks, enhance data insights, and effortlessly build stunning dashboards, all within Excel?

In this comprehensive course, you'll harness the full power of Microsoft Copilot in Excel, transforming how you analyze data and create visualizations. Copilot doesn't just help you automate tasks—it elevates your Excel skills to new heights.

In this detailed course, you will:

- Master the precise steps to set up, activate, and troubleshoot Copilot in Excel.
- Automate Excel tasks by creating advanced formulas and conditional logic using Copilot
- Efficiently organize large datasets by mastering automated sorting, filtering, and conditional formatting
- Design and implement interactive dashboards that blend AI-driven insights with Python visualizations for professional reporting.
- Generate comprehensive Pivot tables and dynamic Pivot charts to simplify data summarization and reporting.
- Conduct detailed text analysis leveraging Python's natural language processing capabilities within Excel.
- Write, insert, and optimize advanced Excel functions, including complex conditional logic and lookup operations.
- Streamline your data workflow with advanced sorting, filtering, and conditional formatting techniques to instantly highlight insights.
- Rapidly create insightful Pivot tables and interactive Pivot charts, enhancing your reporting and analytical capabilities.
- Dive deep into Copilot's abilities in VBA scripting and macros, simplifying the automation of repetitive and complex Excel tasks.
- Implement and execute advanced predictive analytics and comprehensive text analysis using Python scripts directly within Excel.
- Craft interactive, professional-quality dashboards by leveraging AI-driven insights combined with Python programming to visualize key metrics and trends effectively.
- Critically assess and benchmark the performance of Copilot-generated visualizations against traditional manually crafted Excel charts, ensuring robust and accurate visual communication.
- Configure and navigate the Power BI Desktop interface, connecting to diverse data sources for seamless integration.
- Clean and transform data using Power Query to create analysis-ready datasets.
- Build and manage data models with established relationships for unified analysis.
- Design and develop interactive visualizations and dashboards that effectively communicate business insights.
- Implement Power BI's AI tools for predictive analytics and anomaly detection to gain deeper insights.
- Create tailored reports and dashboards for various business scenarios, including HR analytics and project management.
- Develop and monitor KPIs and dynamic measures to track and assess business performance.
- Apply best practices in data visualization and dashboard design to support data-driven decision-making.

Robust data analysis and clear data visualization are essential for making informed, strategic business decisions. This course provides you with comprehensive, cutting-edge skills designed to significantly enhance your productivity, analytical accuracy, and clarity in presenting data-driven insights.

Throughout the course, you'll participate in engaging, practical activities, including:

- Constructing dynamic and interactive dashboards.
- Automating data processing and reporting tasks using VBA.
- Conducting predictive analytics and sentiment analysis with integrated Python scripts.
- Real-World Projects and Practical Applications: Engage in hands-on projects that simulate real business scenarios, including developing dashboards for HR analytics, project management, and customer insights, ensuring you can apply your skills in any professional setting.

This training stands apart by uniquely integrating cutting-edge AI-powered automation tools with established Excel practices, instructed by industry-leading experts who bring extensive real-world experience and tested methodologies to the learning experience.

Enroll today to dramatically enhance your Excel capabilities, accelerate your productivity, and elevate the impact of your data analysis and visualization!

DAY ONE

Welcome to the course on Copilot in Excel Finding and enabling Copilot in Excel

Using Copilot in Excel for writing and inserting Excel functions

Writing and inserting simple Excel Functions
Writing condition functions - IF
Can it write and insert Lookup functions?

Copilot for Sorting, Filtering and Formatting data

Sorting and Filtering using Copilot
Performing conditional formatting using Copilot

Copilot for making Pivot Tables and Pivot Charts

Create Pivot table using Copilot
Create pivot charts using Copilot

Copilot for writing VBA code and creating Macros

Can Copilot write VBA code and create Macros?

Copilot for advanced analysis using Python in Excel

Using Copilot and Python for advanced predictive analytics
Text analysis using Copilot and Python

Dashboarding using Python and Copilot in Excel

Dashboarding Case Study
Creating the dashboard using Copilot and Python in Excel
Comparing the Copilot made charts with human made charts

END OF DAY ONE

DAY TWO

Adding Formula Columns

DEMO: Working with Text
DEMO: Date Calculations
DEMO: Conditional Statements
DEMO: Lookups
RECAP: Adding Formula Columns

Sorting, Filtering and Highlighting

Sorting & Filtering Data
Highlighting Data
DEMO: Formula Based Formatting
DEMO: Color Scales & Data Bars
DEMO: Editing Spreadsheets
RECAP: Sorting, Filtering & Highlighting

Analyzing Data

DEMO: Profiling Data

DEMO: Summarizing Data
DEMO: Visualizing Data
Advanced Analysis with Python
DEMO: Advanced Analysis
RECAP: Analyzing Data

Supporting Advanced Use Cases

DEMO: Dynamic Array Functions
DEMO: VBA Macros

Wrapping Up

END OF DAY TWO

DAY THREE

What is PowerBI?

Power BI Fundamentals Quiz: Understanding the Basics
Installation Steps

Connecting to Data Sources

Uploading data to Power BI
Data Cleaning and Transformation
Exploring Power BI Transformation

Data Modelling

Importing a .CSV file
Importing 2 different datasets and Establishing relationship
Power Query in Power BI - data cleaning and transformation
Activity - Importing data from web and merging it with Excel dataset

Power BI Reports

Report architecture - Creating reports using Report Editor, .pbix files
Report Creation Essentials Quiz: Navigating Power BI's Report Editor
Scatter Chart Proficiency Quiz: Exploring Data Relationships
Bar & Column Chart Essentials Quiz: Visualizing Data Distribution
Activity - Visualize the data using Bar plot, Column plot and Scatter plot
Line Charts
Line & Combo Chart Essentials Quiz: Visualizing Trends and Comparisons
Pie chart & Doughnut Chart Essentials Quiz: Visualizing Proportion
Activity - Display a variation of Pie chart which is Aster Plot
Table and Matrix
Filled Map Essentials Quiz: Visualizing Geographic Data
Treemap Quiz: Visualizing Hierarchical Data in Power BI
Area Chart Quiz: Visualizing Trends Over Time in Power BI
Funnel Chart Quiz: Visualizing Process Stages in Power BI
Power BI Cards and Multi-row Cards: Summary Visualization Essentials
Enhancing Power BI Reports with Textboxes, Images, and Shapes

AI in Power BI

Leveraging AI in Power BI
Test Your Understanding of Artificial Intelligence Feature
AI-Powered Anomaly Detection in Power BI

Hands-on Power BI Dashboard

Comprehensive Project Management Dashboard Creation

END OF WORKSHOP



REGISTRATION FORM
Copilot in Microsoft Excel and Power BI Reporting and Dashboarding

R9 999 Inc Vat
23 - 25 July 2025

NAME AND SURNAME	POSITION	E-MAIL ADDRESS	CONTACT NUMBER

AUTHORIZATION

Name and Surname: _____ Date: _____

Position: _____ Signature: _____