

# € TRAINING

Data Analysis and Visualizations with  
Tableau and Power BI





# Data Analysis and Visualizations with Tableau and Power BI

## Introduction:

In today's data-driven landscape, the ability to transform raw data into compelling visual stories is paramount. Both Tableau and Power BI offer powerful suites of tools that empower users to do just that. Whether you're a seasoned data analyst or a newcomer to the field, this program will equip you with the skills and knowledge needed to harness the full potential of Tableau and Power BI for creating insightful and impactful visualizations.

## Program Objectives:

By the end of this program, participants will be able to:

- Understand the fundamentals of data analysis and visualization.
- Use Microsoft Power BI and Tableau to create interactive dashboards and reports.
- Learn how to clean, transform, and combine data from multiple sources.
- Create compelling visualizations using charts, graphs, and other design elements.
- Communicate data insights effectively to stakeholders.

## Targeted Audience:

- Business intelligence practitioners.
- Data analysts and professionals in various industries.
- Individuals aiming to refine data visualization expertise.
- Those eager to harness Tableau and Power BI capabilities effectively.
- Professionals seeking to elevate their data-driven decision-making.

## Program Outlines:

### Unit 1.

#### Data Analysis & Visualization with Power BI and Tableau:

- Understanding the Fundamentals of Data Analysis and Visualization.
- Overview of Power BI and Tableau.

- Installing and Setting Up Power BI and Tableau.
- Connecting to Data Sources.
- Creating and Formatting Tables and Charts.

## Unit 2.

### Data Cleaning, Transforming, and Combining:

- Data Cleaning and Transformation.
- Combining Data from Multiple Sources.
- Advanced Data Transformations.
- Data Modeling and Relationships.
- DAX Formulas and Functions.

## Unit 3.

### Creating Visualizations and Dashboards:

- Basic Chart Types and Visualizations.
- Advanced Chart Types and Visualizations.
- Designing Effective Dashboards.
- Creating Interactive Filters and Parameters.
- Creating and Using Bookmarks.

## Unit 4.

### Advanced Data Analysis Techniques:

- Advanced Data Analysis Techniques.
- Creating Calculated Fields and Measures.
- Using Pivot Tables and Pivot Charts.
- Time-Series Analysis and Forecasting.
- Statistical Analysis and Modeling.

## Unit 5.

### Communicating Data Insights Effectively:

- Using Storytelling Techniques to Communicate Data Insights.
- Creating Effective Presentations and Reports.
- Collaborating and Sharing Reports.
- Best Practices for Data Visualization and Analysis.
- Recap and Review of Course Material.