

# PL-300 Microsoft Power Bl Certification Training

Aligned with PL-300: Microsoft Power BI Data Analyst certification



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# **Program Overview**

Power BI has emerged as a game-changer in data analysis and visualization, making it a crucial tool for businesses and job seekers. Its importance lies in transforming raw data into clear, actionable insights through user-friendly dashboards and reports. This empowers organizations to make informed decisions, improve efficiency, and gain a competitive edge.

For professionals, mastering Power BI opens doors to many highly demanded job opportunities. Roles like data analysts, business intelligence developers, and Power BI consultants offer lucrative salaries and the chance to work with leading companies across diverse industries. With its intuitive interface, cloud-based accessibility, and ever-growing demand, Power BI offers a valuable skill set for anyone seeking a rewarding career in the data- driven landscape.

This course is aligned with PL-300: Microsoft Power BI Data Analyst certification. You will learn to develop dashboards from published reports expertly, utilize Quick Insights to discover valuable patterns rapidly and adopt practical approaches for various tasks performed within Power BI, from data gathering to in-depth analysis. Additionally, the course provides helpful troubleshooting techniques to address various issues that may arise while using Power BI. With hands-on exercises, real-world projects, and expert guidance from seasoned instructors, you'll gain the practical skills and confidence needed to unlock endless possibilities in the ever- evolving realm of business intelligence.



# **Key Features of the Program**



Curriculum aligned with PL-300: Microsoft Power BI Data Analyst certification



Lifetime access to self-paced learning content



30+ hours of blended learning



Dedicated live sessions by a faculty of industry experts



10+ demo sessions and course-end projects



Industry-recognized course completion certificate



Industry-based projects for experiential learning

# **Delivery Mode:**

Online Bootcamp -Live virtual classroom and Online self-paced learning



# **Who Should Enroll in this Program**

This PL-300 Microsoft Power BI Certification Training program welcomes professionals from all walks of life, and the varied experiences of our participants enrich our discussions and collaborations. With commitment, practice, and the right guidance, anyone can master Power BI and unlock its immense potential in data visualization. Dive into the world of interactive dashboards, insightful reports, and data-driven decision-making, regardless of your background. Some of the sample learner profiles are listed below:

- Analytics professionals
- Data analysts
- Data scientists
- BI and reporting professionals

- Product managers
- Consultants
- Freshers
- Students

# **Key Learning Outcomes**

The PL-300 Microsoft Power BI Certification Training will enable you to:

- Create dynamic dashboards from published reports, enhancing data visualization and interactivity.
- Rapidly generate visuals and dashboards with quick insights to gain valuable insights from your data.
- Utilize natural language in the Q&A feature to generate visuals for actionable insights.
- Create and manage data alerts to stay informed of important changes in your data.
- Learn best practices for report layout and data visualization to maximize the impact of your reports.
- Understand when to use specific charts or graphs based on the questions you're addressing or the story you're presenting.

- Incorporate shapes into your reports to design and emphasize key elements to create narratives.
- Integrate custom visuals into your reports and dashboards to tailor them to your needs.
- Share reports and dashboards effectively, understanding the pros and cons of different sharing methods.
- Complete a comprehensive Power BI data analysis and visualization project from start to finish.
- Enhance team collaboration using Microsoft
   Teams to facilitate smooth communication and sharing.



# **Learning Path**





#### **Lesson 1: Introduction**

Get started with this program by understanding the course components and the topics covered. This will help you to be prepared for the upcoming sessions.

#### **Topics covered**

Course Introduction

Introduction to Power BI

#### **Lesson 2: Terminologies and Interface**

Understand the common terminologies used in Power BI to better understand this tool. Get familiar with the Power Bi interface to get things done quickly and efficiently.

#### **Topics covered**

Getting Familiar With Terminologies and Interface

## **Lesson 3: Connecting the Data Sources**

Explore a variety of data sources supported by Power BI, including files (such as Excel and flat files), databases (such as Access and SQL), web URLs, and Google Sheets. Learn how to seamlessly import data from these sources into Power BI for analysis and visualization. Through a demonstration, you will observe the process of importing data from Google Sheets, Excel files, and web URLs, ensuring that data types are correctly imported.

#### **Topics covered**

Supported Data Sources

Importing Data from Files (Excel & flat files)

Importing Data from Databases (Access, SQL)

Importing Data from Web URLs

Importing Data from Google Sheets



#### **Lesson 4: Data Modelling**

Gain an overview of Power BI's data and relationship views, which are essential for understanding data structures and connections. Explore the Query Editor, learning various data transformation techniques to prepare datasets for analysis. Through a demonstration, you will witness merging and appending data, ensuring correct data type recognition, or making necessary adjustments. Also, learn how to create relationships between tables using auto-detect and custom relations, which is vital for establishing data connections. You will delve into data-shaping transformations to enhance table structures and optimize data structures for analysis.

#### **Topics covered**

- Overview of Data and Relationship Views
- Introduction to Query Editor Various Data Transformations
- Overview of Data and Relationship Views
- Create a Relationship Using Auto-detect and Custom Relations

- Create, Transform, Load
- Data Shape Transformation for Table Structure
- Data Structure Enhancement

#### **Lesson 5: Profile the Data**

Learn techniques to identify and address data anomalies, ensuring data integrity and accuracy. Explore methods to simplify data structures for improved analysis and visualization capabilities. Through interrogation of column properties and data statistics, youwill gain insights into the distribution and characteristics of their datasets, enabling informed decision-making.

- Data Anomalies
- Simplify Data Structure

- Interrogate Column Properties
- Interrogate Data Statistics



#### **Lesson 6: DAX Functions**

Receive an overview of Data Analysis Expressions (DAX), a powerful formula language for manipulating and analyzing data. Explore various DAX calculation types, including aggregation, counting, logical, information, text, date, and time functions, gaining insight into their applications. Through a demonstration, youwill learn to leverage DAX functions to perform calculations and create new measures, enhancing data analysis capabilities.

- Overview of DAX
- DAX Calculation Types
- Using DAX Functions
- Aggregation Functions
- Counting Functions
- Logical Functions

- Information Functions
- Text Functions
- Date and Time Functions
- Filter Functions
- Use DAX to Create a New Measure



#### **Lesson 7: Visualizing the Data**

Learn to work with various types of visuals to communicate data insights effectively. Explore creating visuals such as tables, cards, treemaps, scatter plots, and donut charts through a demonstration, gaining practical experience in visualization creation. Additionally, discover how to generate waterfall charts, maps, and gauge charts to represent data dynamically. Through a guided demonstration, you will also master the creation of custom visuals and learn to design mobile layouts and specific views for optimized data presentation on mobile devices, enhancing the accessibility and usability of their Power BI reports.

#### **Topics covered**

- Working with Visuals
- Table
- Cards
- Treemap
- Scatter Plot
- Donut Chart

- Waterfall Chart
- Map
- Gauge Chart
- Custom Visuals
- Creating Mobile Layout
- Create Mobile-Specific Views

# **Lesson 8: Optimize Model Performance**

Delve into techniques for optimizing data model performance, ensuring efficient data processing and visualization rendering. Learn strategies such as cardinality reduction to minimize the complexity of relationships within the data model. Additionally, explore methods to optimize direct query models and effectively create and manage aggregations to improve query performance. Through query diagnostics tools, you will gain insights into query execution times and identify areas for further optimization, empowering you to maximize the efficiency and responsiveness of their Power BI reports.

- Data Model Performance Optimization
- Cardinality Reduction
- Optimize Direct Query Model

- Create and Manage Aggregations
- Query Diagnostics



#### **Lesson 9: Interactivity and Analytics**

Explore advanced data manipulation techniques such as sorting and grouping data to enhance data visualization clarity. Learn to dynamically refine data analysis by applying filters at different levels -visual, page, and report. Additionally, you will discover various filters and techniques for creating interactivity within reports, allowing users to explore data interactively. Through a guided demonstration, you will master the implementation of hierarchy and drilling functionalities and conditional formatting to highlight key insights effectively, enhancing the visual impact and usability of Power BI reports.

#### **Topics covered**

- Sorting and Grouping Data
- Various levels for Filter (Visual level, Page level and Report level)
- Types Of Filters

- Creating Interactivity
- Hierarchy and Drilling
- Conditional Formatting

## **Lesson 10: Perform Advanced Analytics**

Delve into advanced analytics capabilities to uncover deeper insights within data. Learn to identify outliers and conduct time series analysis to understand trends and patterns. Additionally, you will explore techniques for grouping and binning data to understand data distributions better. Through the use of advanced visualizations such as the Key Influencer Visual and Decomposition Tree Visual, you will effectively identify key drivers and factors influencing their data, enabling informed decisionmaking and actionable insights in Power BI reports.

- Advanced Analytics
- Identify Outliers
- Conduct Time Series Analysis
- Grouping and Binning

- Key Influencer Visual
- Decomposistion Tree Visual
- All Insights



#### **Lesson 11: Publishing Power BI Service**

Learn how to publish and share their dashboards with stakeholders seamlessly. Explore features such as schedule refresh, ensuring that data is kept up-to-date automatically. Additionally, participants will discover the Quick Insights feature, which automatically generates insightful visualizations and trends from their data, saving time and effort in analysis.

#### **Topics covered**

- Publishing and Sharing Dashboards
- Schedule Refresh

Quick Insights

#### **Lesson 12: Manage Datasets**

Explore the functionality of datasets and parameters, empowering customization and refining of reports dynamically. Learn how to create dynamic reports using parameters, allowing for flexible filtering and interactive analysis. Additionally, you will discover how to schedule dataset refreshes to ensure the data remains current and accurate. Through configuring row-level security and promoting or certifying datasets, you will enhance data governance and security measures, ensuring that sensitive information is protected and trusted datasets are readily available for decision-making in Power BI.

- Datasets and Parameters
- Dynamic Reports with Parameters
- Configure Row-Level Security Group Membership

- Dataset Scheduled Refresh
- Incremental Data Refresh Settings
- Promote or Certify Power BI Datasets



#### **Lesson 13: Creating Dashboards and Power BI Administration**

Learn to create dynamic dashboards by integrating reports, providing a comprehensive view of data insights. Explore the versatility of Power BI in designing separate views tailored for both mobile and web platforms. Additionally, you will discover how to enrich dashboards by adding text, image, HTML, and video widgets, enhancing data storytelling and engagement. By exploring queries using natural language, you will learn to use Power BI's intuitive interface to extract insights effortlessly. You will also configure gateway settings for auto-refresh and manage roles and permissions to ensure secure and efficient access to data within Power BI.

- Creating a Dashboard Using Reports
- Creating Separate Views for Mobile and Web
- Adding Text, Image, HTML and Video Widgets to Dashboard

- Exploring Queries Using Natural Language
- Setting Gateway for Auto Refresh
- Roles and Permissions





# **Projects**



# **Data Manipulation and Reporting With Power BI**

Analyze the business data of Zomato, a restaurant aggregation and meal delivery service based in India, and assess its performance by creating reports for various business metrics.



# **Performance Analysis of Insurance Agents**

Define the metrics to analyze agent performance based on several attributes, such as demography, products sold, new business, etc., for an insurance company.



# **Certificate**



Upon completing this Power BI course, you will receive a certificate from Simplilearn, which will testify to your skills as an expert in Power BI.



# **About Simplilearn**

Simplilearn is the world's #1 online bootcamp provider, enabling learners around the globe with rigorous and highly specialized training offered in partnership with world-renowned universities and leading corporations. We focus on emerging technologies and skills transforming the global economy, such as artificial intelligence, data science, cloud computing, programming, and more. Our hands-on and immersive training includes live virtual classes, integrated labs and projects, 24x7 support, and a collaborative learning environment. Over two million professionals and 2000 corporate training organizations across 150 countries have harnessed our award-winning programs to achieve their career and business goals.

For more information, please visit our website:

PL - 300 Microsoft Power BI Certification Training



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