PowerBl

Duration: 24 Hours, 3 Days per week, 2 Hours per day

Module	Major Categories	Duration
Module 01	Introduction to Power BI	4 Hours
Module 02	Data Preparation in Power BI	4 Hours
Module 03	Creating Basic Visualizations	4 Hours
Module 04	Advanced Visualizations and Formatting	4 Hours
Module 05	Data Modeling and DAX	4 Hours
Module 06	Publishing and Sharing Reports	2 Hours
Module 07	Exam and Certification	2 Hours

Class No	Module Details	Duration		
Module 1: Introduction to Power BI				
01	 Day 1: Getting Started with Power BI (2 Hours) Introduction to Power BI and its importance in data analysis Overview of the Power BI interface and workspace Installing and setting up Power BI Desktop Creating your first Power BI project Day 2: Data Sources and Loading Data (2 Hours) Connecting to various data sources (e.g., Excel, SQL, web) Importing and loading data into Power BI 	4 Hours 2 Days		
	 Data source considerations and best practices Hands-on exercise: Loading a sample dataset Module 2: Data Preparation in Power BI 			
	Day 3: Data Transformation and Cleaning (2 Hours) • Understanding the Power Query Editor	_		
	Data transformation operations (filtering, sorting, removing duplicates)	4 Hours 2 Days		
0.0	Data cleaning techniques			
02	Practical exercises: Cleaning and transforming sample data			
	Day 4: Data Modeling Basics (2 Hours)			
	Introduction to data modeling in Power BICreating relationships between tables			
	Managing data model relationships	-		

	Hands-on exercise: Building a simple data model	
	Module 3: Creating Basic Visualizations	
	Day 5: Creating Basic Visualizations (2 Hours)	4 Hours
	Session 1: Introduction to Data Visualization (1 Hour)	
	Understanding the importance of data visualization	
	Principles of effective data visualization	
	Choosing the right visualization type for your data	
	Best practices for creating compelling visuals	
	Session 2: Building Basic Charts (30 minutes)	
	Creating bar charts, column charts, and line charts	
	Using the Fields pane to add data to visuals	
	Customizing visual appearance (colors, labels, titles)	
	Practical exercises: Building basic charts with sample data	
03	Day 6: Advanced Visualizations and Formatting (2 Hours)	
	Session 1: Pie Charts, Scatter Plots, and Maps (1 Hour)	2 Days
	Creating pie charts and scatter plots	
	Adding maps for geographical data	
	Customizing visual properties (legends, tooltips)	
	Hands-on exercise: Building pie charts, scatter plots, and mans.	
	and maps Session 2: Conditional Formatting and Drill-Through (1	
	Hour)	
	Applying conditional formatting to visuals	
	Creating hierarchical visuals for drill-through	
	Utilizing bookmarks and buttons for interactivity	
	Practical exercises: Applying conditional formatting and drill-through actions	
	Module 4: Advanced Visualizations and Formatting	

Day 7: Advanced Visualizations and Formatting (2 Hours) Session 1: Advanced Chart Types (1 Hour) Exploring advanced chart types like waterfall, funnel, and gauge charts Understanding when and how to use these specialized visualizations Customizing advanced charts for specific insights Practical exercises: Creating advanced chart types	
 and gauge charts Understanding when and how to use these specialized visualizations Customizing advanced charts for specific insights Practical exercises: Creating advanced chart types 	
visualizations Customizing advanced charts for specific insights Practical exercises: Creating advanced chart types	
Practical exercises: Creating advanced chart types	
Session 2: Custom Visuals and Third-Party Visuals (1 Hour)	
Introduction to custom visuals and their benefits	4 Hours 2 days
Installing and using custom visuals from Power BI marketplace	
• Incorporating third-party visuals for unique requirements	
Hands-on exercise: Integrating custom and third-party visuals	
Day 8: Formatting and Design Best Practices (2 Hours)	
Session 1: Visual Formatting and Themes (1 Hour)	
Applying consistent formatting to visuals	
Creating and applying custom themes	
Designing for accessibility and readability	
Practical exercises: Formatting visuals and applying themes	
Session 2: Dashboard Design Principles (1 Hour)	
Understanding dashboard layout and organization	
Telling a story with your data through dashboards	
Incorporating interactivity and user-friendly design	
Hands-on exercise: Designing a compelling dashboard	
Module 5: Data Modeling and DAX	
Day 9: Data Modeling and DAX (2 Hours)	
Session 1: Introduction to Data Modeling (1 Hour)	
Understanding the importance of data modeling in Power BI	
• Building relationships between tables	4 Hours
One-to-many and many-to-one relationships	2 days
Practical exercises: Establishing data model relationships	
Session 2: Data Analysis Expressions (DAX) Fundamentals (1 Hour)	

-	 Introduction to DAX and its role in Power BI Understanding DAX syntax and functions 			
	 Understanding DAX syntax and functions 			
[Creating calculated columns and measures 			
,	 Practical exercises: Writing basic DAX calculations 			
Γ	Day 10: Advanced DAX and Time Intelligence (2 Hours)			
	Session 1: Advanced DAX Functions (1 Hour)			
	 Exploring advanced DAX functions (e.g., FILTER, CALCULATE, ALL) 			
,	 Aggregating and filtering data using DAX 			
Ţ,	Building complex calculations			
,	Hands-on exercise: Using advanced DAX functions			
	Session 2: Time Intelligence in Power BI (1 Hour)			
	 Understanding time intelligence functions in DAX 			
	 Calculating year-to-date, month-to-date, and other time-related measures 			
<u>_</u>	Creating dynamic date calculations			
	 Practical exercises: Implementing time intelligence calculations 			
	Module 6: Publishing and Sharing Reports			
	Day 11: Publishing and Sharing Reports (1 Hour)			
	Session 1: Publishing to Power BI Service (30 minutes)			
	Introduction to Power BI Service			
	 Preparing reports for publishing 	2 Hours 1 day		
	 Uploading and publishing reports from Power BI Desktop 			
06	 Practical exercises: Publishing a sample report to Power BI Service 			
	Session 2: Sharing and Collaboration (30 minutes)	1 day		
	 Understanding sharing options in Power BI 			
	 Collaborative features, including sharing dashboards and reports 			
	 Setting up and managing workspaces 			
	 Hands-on exercise: Sharing and collaborating on a report 			
Module 7: Exam and Certification				
07	• Final Assessment Exam	2 Hours 1 day		