

Executive Reporting and Analytics with Power BI

Duration : 40 Hours

- **Absolute Beginner to Advance**
- **Windows Computer Required.**

Module 1: Introduction to Business Intelligence and Power BI

- Understanding Business Intelligence and Analytics
 - Role of Data in Business Decision-Making
 - Introduction to Power BI Platform
 - Components of Power BI Ecosystem
 - Power BI Desktop vs Power BI Service
 - Understanding Reports, Dashboards, and Datasets
 - Power BI Workflow Overview
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Module 2: Getting Started with Power BI Desktop

- Navigating the Power BI Interface
 - Ribbon, Panes, and Views
 - Report View, Data View, and Model View
 - Importing Data into Power BI
 - Understanding Data Refresh
 - Saving and Managing Power BI Files
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Module 3: Connecting to Data Sources

- Working with Excel Workbooks
- Connecting to CSV and Text Files
- Importing Multiple Files

- Connecting to Folder Sources
 - Introduction to Databases
 - Data Source Settings and Management
 - Data Connectivity Best Practices
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Module 4: Data Preparation with Power Query

- Introduction to Power Query Editor
 - Understanding Query Steps
 - Data Profiling Tools
 - Data Cleaning Techniques
 - Removing Duplicates and Errors
 - Handling Null and Blank Values
 - Renaming and Reordering Columns
 - Changing Data Types
 - Sorting and Filtering Data
 - Managing Queries
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Module 5: Advanced Data Transformation

- Splitting and Merging Columns
- Extracting and Replacing Values
- Conditional Columns
- Custom Columns
- Index Columns
- Group By Operations
- Pivot and Unpivot Data
- Merge Queries
- Append Queries
- Preparing Data for Analysis

Module 6: Data Modelling Fundamentals

- Understanding Data Models
- Fact and Dimension Tables
- Star Schema Concepts
- Building Relationships
- Relationship Cardinality
- Active and Inactive Relationships
- Cross Filter Direction
- Model Optimization Techniques
- Best Practices for Data Modeling

Module 7: DAX Fundamentals

- Introduction to DAX
- Calculated Columns
- Measures
- Aggregation Functions
- Mathematical Functions
- Logical Functions
- Text Functions
- Date Functions
- Creating Basic Business Calculations
- Understanding Filter Context

Module 8: Intermediate DAX for Reporting

- CALCULATE Function
- FILTER Function
- ALL Function

- Variables in DAX
 - Time Intelligence Fundamentals
 - Year-to-Date Calculations
 - Month-to-Date Calculations
 - Quarter-to-Date Calculations
 - Running Totals
 - Ranking Calculations
 - Percentage and Growth Analysis
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Module 9: Creating Effective Visualizations

- Tables and Matrix Visuals
 - Bar and Column Charts
 - Line and Area Charts
 - Pie and Donut Charts
 - Cards and KPI Visuals
 - Treemaps
 - Maps and Geographic Analysis
 - Combo Charts
 - Waterfall Charts
 - Selecting the Right Visual
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Module 10: Interactive Reporting

- Visual-Level Filters
- Page-Level Filters
- Report-Level Filters
- Slicers
- Drill Down and Drill Up
- Drill Through Pages

- Report Interactions
 - Tooltips
 - Dynamic Navigation
 - User-Friendly Report Design
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Module 11: Dashboard Design and Data Storytelling

- Principles of Dashboard Design
 - Building Executive Dashboards
 - Layout and Alignment Techniques
 - Themes and Formatting
 - Consistent Design Standards
 - KPI-Based Reporting
 - Storytelling with Data
 - Creating Actionable Insights
 - Dashboard Best Practices
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Module 12: Advanced Reporting Features

- Conditional Formatting
 - Dynamic Titles
 - Dynamic Measures
 - Bookmarks
 - Buttons and Navigation
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Module 13: Power BI Service and Collaboration

- Publishing Reports to Power BI Service
- Creating Dashboards
- Workspaces
- Sharing Reports and Dashboards

- Collaboration Features
 - Data Refresh Scheduling
 - Gateway Overview
 - Monitoring Usage and Adoption
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Module 14: Capstone Project 1

End-to-End Business Analytics Dashboard

- Requirement Gathering
 - Data Preparation
 - Data Modeling
 - DAX Calculations
 - Report Development
 - Dashboard Design
 - Business Insights Presentation
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Module 16: Capstone Project 2

Executive Management Reporting Dashboard

- Multi-Source Data Integration
 - Advanced Data Transformation
 - KPI Development
 - Interactive Reporting
 - Dashboard Optimization
 - Executive Storytelling
 - Final Presentation
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