

Day 1: Introduction to Power BI and Data Analysis

- Understanding Power BI and Its Capabilities
- Exploring Power BI Interface and Workspace
- Connecting to Various Data Sources
- Loading and Transforming Data for Analysis

Day 1: Data Modeling and Relationships

- Fundamentals of Data Modeling
- Creating Relationships Between Data Tables
- Implementing DAX (Data Analysis Expressions) Functions
- Building a Star Schema for Enhanced Analysis

Day 2: Data Visualization Techniques

- Design Principles for Effective Data Visualization
- Creating Basic Visualizations (Bar Charts, Line Charts, Pie Charts)
- Implementing Advanced Visualizations (Maps, Treemaps, Gauges)
- Adding Interactivity with Slicers, Filters, and Drillthroughs

Day 2: Power BI Desktop and Report Development

- Developing Reports Using Power BI Desktop
- Formatting and Customizing Visualizations
- Incorporating Themes and Branding into Reports
- Creating Calculated Columns and Measures in DAX

Day 3: Advanced Data Transformations and Analytics

- Applying Advanced Data Transformations
- Aggregating and Summarizing Data
- Using Time Intelligence Functions in DAX
- Building Dynamic Measures with Parameters

Day 3: Sharing and Collaboration

- Publishing Reports to Power BI Service
- Configuring Dashboards and Tiles
- Enabling Data Refresh and Scheduling
- Sharing Reports with Colleagues and Stakeholders

Day 4: Data Governance and Security

- Implementing Row-Level Security
- Understanding Data Gateways and Data Sources
- Managing Data Access and Permissions
- Ensuring Compliance with Data Policies

Day 4: Advanced Analytics and AI Integration

- Introduction to Power BI AI Capabilities
- Using AI Visuals for Insights (Key Influencers, Decomposition Tree)
- Integrating Azure Machine Learning Models
- Exploring Automated Machine Learning (AutoML) in Power BI

Day 4: Real-world Applications and Case Studies

- Applying Power BI to Business Scenarios
- Case Studies of Successful Power BI Implementations
- Best Practices for Data Analysis and Visualization
- Q&A and Course Wrap-up