Power Business Intelligence Data Modeling Training Course

Professional Development Training Course Outline

Category	Business Intelligence	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Power BI has emerged as a leading business intelligence tool, enabling organizations to transform raw data into actionable insights. In today's data-driven world, the ability to efficiently model data and create interactive dashboards is critical for enhancing decision-making processes. Power Business Intelligence Data Modeling Training Course equips participants with advanced skills in data preparation, transformation, and visualization, allowing businesses to optimize reporting efficiency and drive strategic initiatives.

Participants will gain hands-on experience with data modeling best practices, DAX formulas, and real-world case studies to bridge the gap between data and business decisions. This course ensures that attendees not only understand the technical aspects of Power BI but also how to apply them in organizational contexts to improve productivity, accuracy, and reporting speed.

Programme Curriculum

Power Business Intelligence Data Modeling Training Course

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Course Objectives

1. Master Power BI data modeling techniques for business intelligence.
2. Develop expertise in creating efficient data relationships and hierarchies.
3. Utilize DAX for advanced calculations and performance optimization.
4. Implement best practices for data cleaning, transformation, and normalization.
5. Design interactive dashboards and reports for strategic insights.
6. Apply row-level security to protect sensitive organizational data.
7. Integrate multiple data sources for unified reporting solutions.
8. Perform performance tuning and troubleshooting in Power BI models.
9. Understand and implement time intelligence functions for business reporting.
10. Enable predictive analysis using Power BI advanced features.
11. Conduct data storytelling for impactful presentation of insights.
12. Implement real-world case studies for practical understanding.
13. Foster collaboration between analysts and business users using Power BI.

Organizational Benefits

- Improved business decision-making with actionable insights.
- Increased efficiency in data reporting and analysis workflows.
- Standardized data modeling practices across the organization.
- Enhanced data accuracy and integrity through advanced modeling.
- Optimized resource allocation using predictive analytics.
- Streamlined reporting processes with automated dashboards.
- Improved team collaboration through centralized data models.
- Reduced operational risks with secure and compliant data handling.
- Accelerated business intelligence adoption and usage.
- Better ROI on analytics investments through optimized reporting.

Target Audiences

1. Business analysts seeking advanced Power BI skills.
2. Data analysts looking to enhance modeling expertise.
3. BI developers aiming to optimize Power BI dashboards.
4. Reporting specialists responsible for organizational reporting.
5. Managers and decision-makers leveraging data insights.
6. IT professionals managing data systems and analytics.
7. Financial analysts using data-driven insights for forecasting.
8. Marketing professionals analyzing campaign performance.

Course Duration: 5 days

Course Modules

Module 1: Introduction to Power BI Data Modeling

- Overview of Power BI Desktop and Service
- Understanding datasets, tables, and data types
- Basics of relationships and data hierarchies

- Importance of data modeling in business intelligence
- Real-world example of modeling a sales dataset
- Case study: Modeling retail sales data for trend analysis

Module 2: Data Transformation and Cleaning

- Using Power Query for data preparation
- Handling missing and inconsistent data
- Data normalization and transformation best practices
- Advanced techniques for data shaping and merging
- Automation of repetitive data cleaning tasks
- Case study: Cleaning financial transactions data

Module 3: Relationships and Star Schema

- Understanding one-to-many and many-to-many relationships
- Building star schema for analytical efficiency
- Role of primary and foreign keys in models
- Optimizing data models for performance
- Visualizing relationships and dependencies
- Case study: Implementing a star schema for e-commerce data

Module 4: Advanced DAX Functions

- Calculated columns vs. measures
- Time intelligence functions for period comparisons
- Conditional calculations and dynamic measures
- Using variables for optimized calculations
- Error handling and performance optimization
- Case study: DAX-based sales performance metrics

Module 5: Hierarchies and Drill-through Reports

- Creating and managing hierarchies
- Using drill-through for detailed analysis
- Implementing parent-child hierarchies
- Dynamic reporting with hierarchy filters
- Best practices for navigation and usability
- Case study: Building drill-through for HR analytics

Module 6: Row-Level Security

- Understanding row-level security concepts
- Implementing RLS in Power BI Desktop
- Dynamic vs. static security roles
- Testing and validating security configurations
- Monitoring access and usage analytics
- Case study: Securing confidential financial reports

Module 7: Data Integration and Sources

- Connecting multiple data sources to Power BI

- Combining structured and unstructured data
- Using DirectQuery and import modes
- Integrating cloud and on-premises data
- Handling data refresh and scheduling
- Case study: Merging CRM and ERP datasets

Module 8: Dashboard Design and Visualization

- Principles of effective dashboard design
- Interactive visuals and storytelling techniques
- Custom visuals and conditional formatting
- Performance optimization for large datasets
- Sharing dashboards with stakeholders
- Case study: Designing a KPI dashboard for marketing campaigns

Training Methodology

- Instructor-led sessions with practical demonstrations
- Hands-on labs and exercises for real-world experience
- Interactive quizzes to reinforce learning
- Group discussions to encourage problem-solving
- Real-life case studies for applied understanding
- Continuous feedback and Q&A sessions

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

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