KOENIG SOLUTIONS · COURSE OUTLINE

# Power BI: DAX Modeling, RLS & Copilot Reports

Learn to model, visualize and secure Power BI data with DAX, row-level security and Copilot-assisted reports.

| 4 Days | 20 | 64 | 22 |
|---|---|---|---|
| 32 HOURS | MODULES | TOPICS | HANDS-ON ACTIVITIES |

## COURSE OVERVIEW

This course covers the various methods and best practices that are in line with business and technical requirements for modeling, visualizing, and analyzing data with Power BI. The course will show how to access and process data from a range of data sources including both relational and non-relational sources. Finally, this course will also discuss how to manage and deploy reports and dashboards for sharing and content distribution.

## WHO THIS COURSE IS FOR

**The audience for this course are data professionals and business intelligence professionals who want to learn how to accurately perform data analysis using Power BI**

**This course is also targeted toward those individuals who develop reports that visualize data from the data platform technologies that exist on both in the cloud and on-premises**

## LEARNING OBJECTIVES

- Describe data analyst roles and Power BI building blocks
- Retrieve and prepare data from various data sources
- Clean, transform and load data for analysis
- Design a data model using star schema and relationships
- Apply DAX for measures, calculated columns and time intelligence
- Optimize DAX performance with variables and Performance Analyzer
- Build reports with visuals, layout, navigation and filtering
- Configure row-level security and distribute content in workspaces

COURSE SYLLABUS

# 20 Modules, 64 Topics

01

## Learning Path 1: Get Started with Microsoft Data Analytics - Discover Data Analysis

**TOPICS**

Different data roles · Data analyst tasks

02

Demo

## Learning Path 1: Get Started with Microsoft Data Analytics - Get Started Building with Power BI

**TOPICS**

Data analytics with Microsoft · Building blocks of Power BI · Compelling visuals and reports

01

Demo Lab

## Learning Path 2: Prepare Data in Power BI Desktop - Get Data in Power BI

**TOPICS**

Retrieve data from various data sources · Select storage mode · Resolve import errors

02

Demo Lab

## Learning Path 2: Prepare Data in Power BI Desktop - Clean, Transform, and Load Data in Power BI

**TOPICS**

- Resolve inconsistencies and data quality issues
- Profile data for better insights
- Apply data shape transformations

01

Demo Lab

## Learning Path 3: Model Data with Power BI Desktop - Design a Data Model in Power BI

**TOPICS**

Data types · Star schema · Create relationships · Edit relationships · Create hierarchies

02

Demo Lab

## Learning Path 3: Model Data with Power BI Desktop - Introduction to DAX

**TOPICS**

What is DAX · Calculated measures, columns, and tables

03

Lab

## Learning Path 3: Model Data with Power BI Desktop - Advanced DAX Concepts

**TOPICS**

Filter context · Semi-additive measures · Time intelligence functions

04

Demo

## Learning Path 3: Model Data with Power BI Desktop - Optimize DAX Performance

**TOPICS**

Variables in DAX expressions · Performance analyzer

01

## Learning Path 4: Build Power BI Visuals and Reports - Work with Visuals

**TOPICS**

Add visuals to report · Choose effective visuals · Format and configure visuals

02

Demo Lab

## Learning Path 4: Build Power BI Visuals and Reports - Report Layout and Interactions

**TOPICS**

Design appealing report layout · Cross-highlight and drill down

03

## Learning Path 4: Build Power BI Visuals and Reports - Navigation and Filtering

**TOPICS**

Navigate and sort report · Filters and slicer visual

04

Lab

## Learning Path 4: Build Power BI Visuals and Reports - Report Design Elements

**TOPICS**

Add shapes, buttons, text, images · Bookmarks and drill through · Selection order (accessibility) · When to use paginated reports

05

Demo Lab

## Learning Path 4: Build Power BI Visuals and Reports - Perform Advanced Analytics with Power BI Desktop

**EXPLORE INSIGHTS WITH ADVANCED ANALYTICS**

- Data comparison with Analyze feature
- Group and bin data
- Cluster data and find outliers with Scatter chart visual
- Key Performance Indicator visual
- What-if parameters for scenario planning
- Leverage AI visuals

**AI INSIGHTS DURING DATA PREPARATION**

- Use key influencers and decomposition tree visuals

01

Demo

## Learning Path 5: Manage Workspaces and Datasets in Power BI - Power BI Workspaces

**TOPICS**

Create and manage workspaces · Interact with workspace items

02

Demo

## Learning Path 5: Manage Workspaces and Datasets in Power BI - Distribute and Manage Content

**TOPICS**

Create apps for distribution · Refresh, protect, and endorse datasets · Review Usage Metrics report · Power BI service licensing

03

Demo Lab

## Learning Path 5: Manage Workspaces and Datasets in Power BI - Dashboards in Power BI Service

**TOPICS**

Create and use dashboards

04

Demo Lab

## Learning Path 5: Manage Workspaces and Datasets in Power BI - Row-Level Security Overview

**TOPICS**

Enforce row-level security

01

## Learning Path 6: CoPilot for Power BI (Preview) - Overview of Copilot for Power BI

**TOPICS**

**Feature overview:** Copilot capabilities · Copilot requirements · Considerations and limitations

02

## Learning Path 6: CoPilot for Power BI (Preview) - Work with Copilot in Power BI

**TOPICS**

- Update your data model to work well with Copilot for Power BI
- Create reports in the Power BI service with Copilot
- Create reports in Power BI Desktop with Copilot
- Write Copilot prompts for creating report pages in Power BI
- Create a narrative with Copilot for Power BI
- Summarize a report page in the Copilot pane
- Write Copilot prompts to create narrative visuals in Power BI
- Use Copilot to create measure descriptions
- Enhance Q&A with Copilot for Power BI

03

### Learning Path 6: CoPilot for Power BI (Preview) - Copilot for Fabric and Power BI (Preview)

TOPICS

- Overview of Copilot in Fabric and Power BI
- Enable Copilot in Fabric and Power BI (preview)
- Privacy, security, and responsible use for Copilot in Power BI (preview)

HANDS-ON ACTIVITIES

## Practise What You Learn

| # | MODULE | ACTIVITY |
|---|---|---|
| 02 | **Learning Path 1: Get Started with Microsoft Data Analytics - Get Started Building with Power BI** | **Demo:** Get started with Microsoft data analytics |
| 01 | **Learning Path 2: Prepare Data in Power BI Desktop - Get Data in Power BI** | **Demo:** Get data in Power BI Desktop<br>**Lab:** Prepare data in Power BI Desktop |
| 02 | **Learning Path 2: Prepare Data in Power BI Desktop - Clean, Transform, and Load Data in Power BI** | **Demo:** Clean, transform, and load data in Power BI<br>**Lab:** Load data in Power BI Desktop |
| 01 | **Learning Path 3: Model Data with Power BI Desktop - Design a Data Model in Power BI** | **Demo:** Design a data model in Power BI<br>**Lab:** Design a data model in Power BI Desktop |
| 02 | **Learning Path 3: Model Data with Power BI Desktop - Introduction to DAX** | **Demo:** Create measures using DAX in Power BI<br>**Lab:** Create DAX calculations in Power BI Desktop |
| 03 | **Learning Path 3: Model Data with Power BI Desktop - Advanced DAX Concepts** | **Lab:** Advanced DAX calculations in Power BI Desktop |
| 04 | **Learning Path 3: Model Data with Power BI Desktop - Optimize DAX Performance** | **Demo:** Optimize model performance in Power BI Desktop |
| 02 | **Learning Path 4: Build Power BI Visuals and Reports - Report Layout and Interactions** | **Demo:** Create reports in Power BI Desktop<br>**Lab:** Design a report in Power BI Desktop |

| # | MODULE | ACTIVITY |
|---|---|---|
| 04 | **Learning Path 4: Build Power BI Visuals and Reports - Report Design Elements** | **Lab:** Enhance a report in Power BI Desktop |
| 05 | **Learning Path 4: Build Power BI Visuals and Reports - Perform Advanced Analytics with Power BI Desktop** | **Demo:** Perform data analysis in Power BI Desktop<br>**Lab:** Perform data analysis in Power BI |
| 01 | **Learning Path 5: Manage Workspaces and Datasets in Power BI - Power BI Workspaces** | **Demo:** Create and manage workspaces in Power BI service |
| 02 | **Learning Path 5: Manage Workspaces and Datasets in Power BI - Distribute and Manage Content** | **Demo:** Manage files and datasets in Power BI service |
| 03 | **Learning Path 5: Manage Workspaces and Datasets in Power BI - Dashboards in Power BI Service** | **Demo:** Create a dashboard in Power BI service<br>**Lab:** Create a Power BI dashboard |
| 04 | **Learning Path 5: Manage Workspaces and Datasets in Power BI - Row-Level Security Overview** | **Demo:** RLS<br>**Lab:** Enforce row-level security in Power BI |

WHAT IS INCLUDED

## Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

## Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

FLEXIBLE DELIVERY

## Learn the Way That Suits You

Classroom Training | Live Online Classes (ILO) | Fly-Me-A-Trainer (FMAT) | Flexi (Self-Paced) | 1-on-1 Training

### Ready to Get Started?

Talk to a learning advisor about schedules, group training and customised delivery.

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