

KOENIG SOLUTIONS • COURSE OUTLINE

PL-300T00: Design and Manage Analytics Solutions Using Power BI

Learn to connect, model, visualize, and manage data in Power BI, from data preparation to secure report distribution.

3 Days

24 HOURS

18

MODULES

59

TOPICS

10

HANDS-ON LABS

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

Candidates for this exam deliver actionable insights by working with available data and applying domain expertise. They provide meaningful business value through easy-to-comprehend data visualizations, enable others to perform self-service analytics, and deploy and configure solutions for consumption.

Candidates for this exam should be proficient at using Power Query and writing expressions by using Data Analysis Expressions (DAX). These professionals know how to assess data quality. Plus, they understand data security, including row-level security and data sensitivity.

LEARNING OBJECTIVES

- Connect to relational and non-relational data sources
- Clean and transform data using Power Query
- Design data models using star schema and relationships
- Build measures and calculations using DAX functions
- Design reports and dashboards with interactive visuals
- Configure row-level security using static and dynamic methods
- Manage workspaces and scheduled refresh for semantic models
- Explore Copilot and Microsoft Fabric for analytics

18 Modules, 59 Topics

01

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

TOPICS

Different types of Analysis · Data analyst tasks

02

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

TOPICS

Power BI services and applications work · The Flow of Power BI · Building Blocks of Power BI

01

Lab

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

TOPICS

Identify and connect to a data source · Select storage mode · Fix performance issues · Resolve import errors

02

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
- Apply user friendly naming conventions
- Apply data shape transformations

01

Lab

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

TOPICS

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

02

Lab

Learning Path 3: Model Data with Power BI Desktop - Add Measures to Semantic Models

TOPICS

DAX concept and syntax · Calculated measures, columns, and tables

03**Lab**

Learning Path 3: Model Data with Power BI Desktop - Use DAX Functions

TOPICS

- Filter context
- Understand and manipulate filter context
- Use DAX functions to extend semantic models
- Semi-additive measures
- Create custom date table for Time intelligence functions

04

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

TOPICS

Variables in DAX expressions · Performance analyzer

05**Lab**

Learning Path 3: Model Data with Power BI Desktop - Create Visual Calculations

TOPICS

- Understand visual calculations and how they differ from measures
- Create visual calculations in Power BI Desktop
- Use parameters in visual calculations

01**Lab**

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

TOPICS

- Understand Power BI report structure and report objects
- Choose effective visuals
- Format and configure visuals
- Explore interactive features of visuals

02**Lab**

Learning Path 4: Build Power BI Visuals and Reports - Enhance Reports for User Experience

TOPICS

Design report navigation and filtering · Add report elements and bookmarks · Drill through to other visuals · Choose when to use paginated reports

01

Learning Path 5: Perform Advanced Analytics with Power BI Desktop - Perform Advanced Analytics

TOPICS

Use the Analyze feature · Group, Bin and Cluster data · Identify patterns and trends

01

Learning Path 6: Manage Workspaces and Datasets in Power BI - Create and Manage Workspaces

TOPICS

Create workspaces and manage permissions · Explore different workspace items · Share and distribute reports

02

Learning Path 6: Manage Workspaces and Datasets in Power BI - Manage Semantic Models

TOPICS

- Use a Power BI gateway to connect to on-premises data sources
- Configure a scheduled refresh for a semantic model
- Configure incremental refresh settings
- Manage and promote semantic models

03**Lab**

Learning Path 6: Manage Workspaces and Datasets in Power BI - Create Dashboards

TOPICS

Create a Power BI dashboard · Pin a live report page to a dashboard · Add a theme to the visuals in your dashboard · Set a mobile view

04**Lab**

Learning Path 6: Manage Workspaces and Datasets in Power BI - Implement row-level Security

TOPICS

- Configure row-level security by using a static method
- Configure row-level security by using a dynamic method row-level security

05

Learning Path 6: Manage Workspaces and Datasets in Power BI - Explore Copilot for Power BI

TOPICS

- Understand semantic model requirements
- Create visuals and reports using Copilot for Power BI
- Create summaries using Copilot for Power BI

06

Learning Path 6: Manage Workspaces and Datasets in Power BI - Explore end-to-end Analytics with Microsoft Fabric

TOPICS

- Describe end-to-end analytics in Microsoft Fabric
- Understand data teams and roles that use Fabric
- Describe how to enable and use Fabric

Practise What You Learn

#	MODULE	ACTIVITY
01	Learning Path 2: Prepare Data in Power BI Desktop - Get Data in Power BI	Get data in Power BI Desktop
02	Learning Path 2: Prepare Data in Power BI Desktop - Clean, Transform, and Load Data in Power BI	Load data in Power BI Desktop
01	Learning Path 3: Model Data with Power BI Desktop - Design a Data Model in Power BI	Design a data model in Power BI Desktop
02	Learning Path 3: Model Data with Power BI Desktop - Add Measures to Semantic Models	Create DAX calculations in Power BI Desktop
03	Learning Path 3: Model Data with Power BI Desktop - Use DAX Functions	Advanced DAX calculations in Power BI Desktop
05	Learning Path 3: Model Data with Power BI Desktop - Create Visual Calculations	Create visual calculations in Power BI Desktop
01	Learning Path 4: Build Power BI Visuals and Reports - Design Power BI Reports	Design a report in Power BI Desktop
02	Learning Path 4: Build Power BI Visuals and Reports - Enhance Reports for User Experience	Enhance a report in Power BI Desktop
03	Learning Path 6: Manage Workspaces and Datasets in Power BI - Create Dashboards	Create a Power BI Dashboard
04	Learning Path 6: Manage Workspaces and Datasets in Power BI - Implement row-level Security	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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✉ info@koenig-solutions.com