





Microsoft Power BI Data Analyst

Duración: 3 Días Código del Curso: M-PL300

Temario:

This course will discuss 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 also show how to access and process data from a range of data sources including both relational and non-relational data. This course will also explore how to implement proper security standards and policies across the Power BI spectrum including datasets and groups. The course will also discuss how to manage and deploy reports and dashboards for sharing and content distribution.

Dirigido a:

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.

Objetivos:

- Ingest, clean, and transform data
- Model data for performance and scalability
- Design and create reports for data analysis

- Apply and perform advanced report analytics
- Manage and share report assets

Prerequisitos:

Successful Data Analysts start this role with experience of working with data in the cloud.

Specifically:

- Understanding core data concepts.
- Knowledge of working with relational data in the cloud.
- Knowledge of working with non-relational data in the cloud.
- Knowledge of data analysis and visualization concepts.

You can gain the prerequisites and a better understanding of working with data in Azure by completing M-DP900 Microsoft Azure Data Fundamentals before taking this course.

Exámenes y certificación

Contenido:

Module 1: Get Started with Microsoft Data Analytics

This module explores the different roles in the data space, outlines the important roles and responsibilities of a Data Analysts, and then explores the landscape of the Power BI portfolio.

- Data Analytics and Microsoft
- Getting Started with Power BI

After completing this module, students will be able to:

- Explore the different roles in data
- Identify the tasks that are performed by a data analyst
- Describe the Power BI landscape of products and services
- Use the Power BI service
- Identify and retrieve data from different data sources
- Understand the connection methods and their performance implications
- Use Microsoft Dataverse
- Connect to a data flow
- Apply data shape transformations
- Enhance the structure of the data
- Profile and examine the data
- Understand the basics of data modeling
- Define relationships and their cardinality
- Implement Dimensions and Hierarchies
- Understand DAX
- Use DAX for simple formulas and expressions
- Create calculated tables and measures
- Build simple measures
- Work with Time Intelligence and Key Performance Indicators
- Understand the importance of variables
- Enhance the data model
- Optimize the storage model
- Design a report page layout
- Select and add effective visualizations
- Add basic report functionality
- Add report navigation and interactions
- Create a Dashboard
- Understand real-time Dashboards
- Enhance Dashboard usability
- Use the Analyze feature
- Identify outliers in data
- Use the AI visuals
- Use the Advanced Analytics custom visual
- Create and manage a workspace
- Understand workspace collaboration
- Monitor workspace usage and performance
- Distribute an App

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- Manage datasets and parameters
- Build dynamic reports with parameters
- Schedule dataset refresh
- Troubleshoot gateway service connectivity

This module introduces you to the world of DAX and its true power for enhancing a model. You will learn about aggregations and the concepts of Measures, calculated columns and tables, and Time Intelligence functions to solve calculation and data analysis problems.

- Introduction to DAX
- Real-time dashboards
- Advanced DAX

Lab : Introduction to DAX in Power BI Desktop

- Create calculated tables
- Create calculated columns
- Create measures

Lab : Advanced DAX in Power BI Desktop

- Use the CALCULATE() function to manipulate filter context
- Use Time Intelligence functions

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- Understand real-time Dashboards
- Enhance Dashboard usability

Module 9: Identify Patterns and Trends in Power BI

This module helps you apply additional features to enhance the report for analytical insights in the data, equipping you with the steps to use the report for actual data analysis. You will also perform advanced analytics using AI visuals on the report for even deeper and meaningful data insights.

- Advanced Analytics
- Data Insights through AI visuals

Lab : Data Analysis in Power BI Desktop

- Create animated scatter charts
- Use the visual to forecast values

After completing this module, students will be able to:

- Explore the different roles in data
- Identify the tasks that are performed by a data analyst
- Describe the Power BI landscape of products and services

Identify and retrieve data from different

Understand the connection methods and

their performance implications

Apply data shape transformations

Enhance the structure of the data

Use DAX for simple formulas and

Understand the basics of data modeling

Define relationships and their cardinality

Implement Dimensions and Hierarchies

Create calculated tables and measures

Understand the importance of variables

Select and add effective visualizations

Add report navigation and interactions

Use the Advanced Analytics custom visual

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Understand real-time Dashboards

Create and manage a workspace

Work with Time Intelligence and Key

Profile and examine the data

Use the Power BI service

Use Microsoft Dataverse
 Connect to a data flow

data sources

Understand DAX

Build simple measures

Performance Indicators

Enhance the data model

Optimize the storage model

Design a report page layout

Add basic report functionality

Enhance Dashboard usability

Use the Analyze feature

Identify outliers in data

Use the AI visuals

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Create a Dashboard

expressions

Implement row-level security using both the Static and Dynamic methods

Module 2: Getting Data in Power BI

This module explores identifying and retrieving data from various data sources. You will also learn the options for connectivity and data storage and understand the difference and performance implications of connecting directly to data vs. importing it.

- Data Analytics and Microsoft
- Optimize Performance
- Resolve Data Errors

Lab : Preparing Data in Power BI Desktop

Prepare Data

After completing this module, students will be able to:

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- Use the Advanced Analytics custom visual
- Create and manage a workspace
- Understand workspace collaboration

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- Understand workspace collaboration
 Monitor workspace usage and performance
- Distribute an App
- Manage datasets and parameters
- Build dynamic reports with parameters
- Schedule dataset refresh
- Troubleshoot gateway service connectivity
- Implement row-level security using both the Static and Dynamic methods

Module 6: Optimize Model Performance in Power BI

In this module you are introduced to steps, processes, concepts, and data modeling best practices necessary to optimize a data model for enterprise-level performance.

Optimize the data model for performanceOptimize DirectQuery Models

After completing this module, students will be able to:

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- Select and add effective visualizations
- Add basic report functionality
- Add report navigation and interactions

- Understand workspace collaboration
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Module 10: Create and Manage Workspaces in Power BI

This module will introduce you to Workspaces, including how to create and manage them. You will also learn how to share content, including reports and dashboards, and then learn how to distribute an App.

Creating Workspaces

data analyst

data sources

products and services

Use the Power BI service

Use Microsoft Dataverse

Connect to a data flow

Understand DAX

Build simple measures

Performance Indicators

Enhance the data model

Optimize the storage model

Design a report page layout

Add basic report functionality

Enhance Dashboard usability

Use the Analyze feature

Identify outliers in data

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Create a Dashboard

expressions

Sharing and Managing Assets

After completing this module, students will be able to:

Identify the tasks that are performed by a

Explore the different roles in data

Describe the Power BI landscape of

Identify and retrieve data from different

Understand the connection methods and

their performance implications

Apply data shape transformations

Enhance the structure of the data

Use DAX for simple formulas and

Understand the basics of data modeling

Define relationships and their cardinality

Implement Dimensions and Hierarchies

Create calculated tables and measures

Work with Time Intelligence and Key

Understand the importance of variables

Select and add effective visualizations

Add report navigation and interactions

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Understand real-time Dashboards

Profile and examine the data

- Monitor workspace usage and performance
- Distribute an App
- Manage datasets and parameters
- Build dynamic reports with parameters
- Schedule dataset refresh
- Troubleshoot gateway service connectivity
- Implement row-level security using both the Static and Dynamic methods

Module 3: Cleaning, Transforming, and Loading Data in Power BI

This module teaches you the process of profiling and understanding the condition of the data. They will learn how to identify anomalies, look at the size and shape of their data, and perform the proper data cleaning and transforming steps to prepare the data for loading into the model.

- Shaping the Data
- Profiling the Data
- Enhance the data structure

Lab : Loading Data in Power BI Desktop

Loading Data

After completing this module, students will be able to:

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- Identify and retrieve data from different data sources
- Understand the connection methods and their performance implications
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- Add report navigation and interactions
- Create a Dashboard

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- Create a Dashboard
- Understand real-time Dashboards
- Enhance Dashboard usability
- Use the Analyze feature
- Identify outliers in data
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Module 7: Create Reports in Power BI

This module introduces you to the fundamental concepts and principles of designing and building a report, including selecting the correct visuals, designing a page layout, and applying basic but critical functionality. The important topic of designing for accessibility is also covered.

- Design a report
- Enhance the report

Lab : Enhancing reports with interaction and formatting in Power BI Desktop

- Create and configure Sync Slicers
- Create a drillthrough page
- Apply conditional formatting
- Create and use Bookmarks

Lab : Designing a report in Power BI Desktop

- Design a report
- Configure visual fields and format properties

After completing this module, students will be able to:

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- Use Microsoft Dataverse
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Apply data shape transformations

- Use the AI visuals
- Use the Advanced Analytics custom visual
- Create and manage a workspace
- Understand workspace collaboration
- Monitor workspace usage and performance
- Distribute an App
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- Build dynamic reports with parameters
- Schedule dataset refresh
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Module 11: Manage Files and Datasets in Power BI

This module will introduce you to parameters and datasets. You will also learn how to manage datasets and parameters, build dynamic reports with parameters, and set dataset refresh options.

- Parameters
- Datasets

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- Explore the different roles in data
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- Use the Power BI service

Use Microsoft Dataverse

Connect to a data flow

Understand DAX

Build simple measures

Performance Indicators

Enhance the data model

Optimize the storage model

Design a report page layout

Add basic report functionality

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Define relationships and their cardinality

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Create calculated tables and measures

Work with Time Intelligence and Key

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Understand real-time Dashboards

Profile and examine the data

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- Enhance Dashboard usability
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Module 4: Design a Data Model in Power BI

This module teaches the fundamental concepts of designing and developing a data model for proper performance and scalability. This module will also help you understand and tackle many of the common data modeling issues, including relationships, security, and performance.

- Introduction to data modeling
- Working with tables
- Dimensions and Hierarchies

Lab : Data Modeling in Power BI Desktop

- Create Model Relationships
- Configure Tables and Column Properties
- Create hierarchies

After completing this module, students will be able to:

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- Understand DAX

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- Use DAX for simple formulas and expressions
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- Build simple measures
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Module 8: Create Dashboards in Power BI

In this module you will learn how to tell a compelling story through the use of dashboards and the different navigation tools available to provide navigation. You will be introduced to features and functionality and how to enhance dashboards for usability and insights.

- Create a Dashboard
- Real-time Dashboards
- Enhance a Dashboard

Lab : Creating a Dashboard in Power BI Service

Create a Dashboard

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- Pin visuals to a Dashboard
- Use Q;A to create a dashboard tile

After completing this module, students will be able to:

- Use the Analyze feature
- Identify outliers in data
- Use the AI visuals
- Use the Advanced Analytics custom visual
- Create and manage a workspace
- Understand workspace collaborationMonitor workspace usage and
- performance Distribute an App
- Manage datasets and parameters
 Build dynamic reports with parameters
- Schedule dataset refresh

and how to implement.

Security in Power BI

Lab : Enforce Row-Level Security

Explore the different roles in data

Describe the Power BI landscape of

Identify and retrieve data from different

Understand the connection methods and

their performance implications

Apply data shape transformations

Enhance the structure of the data

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Select and add effective visualizations

Add report navigation and interactions

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Profile and examine the data

Enforce row-level security

able to:

data analyst

data sources

products and services

Use the Power BI service

Use Microsoft Dataverse

Connect to a data flow

Understand DAX

Build simple measures

Performance Indicators

Enhance the data model

Optimize the storage model

Design a report page layout

Add basic report functionality

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Configure many-to-many relationships

After completing this module, students will be

Identify the tasks that are performed by a

- Troubleshoot gateway service connectivity
- Implement row-level security using both

Module 12: Row-level Security in Power BI

This module will introduce you to row-level

security, both static and dynamic methods,

the Static and Dynamic methods

Performance Indicators

- Understand the importance of variables
- Enhance the data model
- Optimize the storage model
- Design a report page layout
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Module 5: Create Model Calculations using DAX in Power BI

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- Troubleshoot gateway service
- connectivity
- Implement row-level security using both the Static and Dynamic methods

- Create a Dashboard
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Más información:

Para más información o para reservar tu plaza llámanos al (34) 91 425 06 60

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Global Knowledge Network Spain, C/ Retama 7, 6ª planta, 28045 Madrid

- Create and manage a workspace
- Understand workspace collaboration
- Monitor workspace usage and