



*Training Course:  
Advanced Data Analysis with Power BI*

*11 - 15 November 2024  
Barcelona (Spain)  
Grupotel Gran Via 678*

# Training Course: Advanced Data Analysis with Power BI

Training Course code: SC234935 From: 11 - 15 November 2024 Venue: Barcelona (Spain) - Grupotel Gran Via 678  
Training Course Fees: 5775 € Euro

## Introduction

This course will provide you the knowledge to understand and implement the key principles about the aspects of Data analysis and modeling in Power BI using tools such as Power BI Desktop and accompanying the cloud service for publishing and consumption of BI Assets. This course would then cover the basics of report development embedded analytics in Power BI to embed the content into custom applications, Real time dashboarding and advanced analytics involving data science and development in Power BI.

## Training objectives

- Learn how to ingest, clean, transform, and model data
- Model data for performance and scalability
- Design and create paginated reports to analyze data with Power BI
- Apply and perform advanced report analytics
- Manage and share report assets
- Create paginated reports in Power BI

## Target Audience

The audience for this course is:

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

## Training outlines

### Get Started with Power BI Data

- Data Analytics and Microsoft
- 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
- Getting Started with Power BI

### Lab: Getting Started

- Use the Power BI service

### Prepare Data in Power BI

- Get data from various data sources

- Optimize performance
- Resolve data errors
- Identify and retrieve data from different data sources
- Understand the connection methods and their performance implications

#### Lab: Preparing Data in Power BI Desktop

- Use Microsoft Dataverse
- Connect to a data flow

#### Clean, Transform, and Load Data in Power BI

- Apply data shape transformations
- Enhance the structure of the data
- Profile and examine the data

#### Lab: Transforming and Loading Data

#### Design a Data Model in Power BI

- Understand the basics of data modeling
- Working with tables
- Implement Dimensions and Hierarchies

#### Lab: Data Modeling in Power BI Desktop

- Create and Define Model Relationships and their cardinality
- Configure Tables
- Review the model interface
- Create Quick Measures
- Create histograms and rankings

#### Lab: Advanced Data Modeling in Power BI Desktop

- Configure many-to-many relationships
- Enforce row-level security

#### Create Measures using DAX in Power BI

- Understand DAX and DAX context
- Use DAX for simple formulas and expressions

#### Lab: Introduction to DAX in Power BI Desktop

- Use the CALCULATE function to manipulate filter context
- Work with Time Intelligence and Key Performance Indicators

#### Lab: Advanced DAX in Power BI Desktop

- Create calculated tables and measures
- Create calculated columns
- Create and build simple measures

- After completing this module, you will be able to:

#### Optimize Model Performance

- Understand the importance of variables
- Optimize the model for performance
- Optimize DirectQuery Models
- Optimize the storage model
- Create and manage Aggregations

#### Create Reports

- Design a report page layout
- Enhance the report with effective visualizations
- Add basic report functionality
- Add report navigation and interactions
- Improve report performance
- Design for accessibility

#### Lab: Designing a report in Power BI

- Create a live connection in Power BI Desktop
- Design a report
- Configure visual fields and format properties

#### Lab: Enhancing Power BI reports with interaction and formatting

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

#### Create Dashboards

- Create a Dashboard
- Understand real-time Dashboards
- Enhance Dashboard usability

#### Lab: Designing a report in Power BI Desktop - Part 1

- Pin visuals to a Dashboard
- Configure a Dashboard tile alert
- Use Q&A to create a dashboard tile

#### Create Paginated Reports in Power BI

- Explain paginated reports
- Create Paginated reports

#### Lab: Creating a Paginated report

- Use Power BI Report Builder

- Design a multi-page report layout
- Create and configure a data source and dataset
- Work with charts and tables
- Create a report parameter
- Export a report to PDF

### Perform Advanced Analytics

- Explore statistical summary with Advanced Analytics
- Use the Analyze feature to gain Data Insights through AI visuals

### Lab: Data Analysis in Power BI Desktop

- Create animated scatter charts
- Use the visual to forecast values
- Identify outliers in data
- Conduct time-series analysis
- Use the AI visuals
- Use the Advanced Analytics custom visual
- Work with Decomposition Tree visual
- Work with the Key Influencers visual

### Manage Datasets in Power BI

- Create and work with parameters
- Manage datasets
- Configure dataset refresh
- Troubleshoot gateway connectivity
- Understand the aspects of Power BI security
- Configure row-level security roles and group memberships

### Create and Manage Workspaces in Power BI

- Creating Workspaces
- Sharing and Managing Assets
- Create and manage a workspace

### Lab: Publishing and Sharing Power BI Content

- Map security principals to dataset roles
- Share a dashboard
- Understand workspace collaboration
- Monitor workspace usage and performance
- Publish and Distribute an App

## Registration form on the Training Course: Advanced Data Analysis with Power BI

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Complete & Mail or fax to Global Horizon Training Center (GHTC) at the address given below

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- Please find enclosed a cheque made payable to Global Horizon
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