

# Analyzing Data with Power BI (DA-100T00-AC)

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. Finally, this course will show how to build paginated reports within the Power BI service and publish them to a workspace for inclusion within Power BI.

© CODE: ED23B19

**DURATION:** 28 hours

**START DATE:** 30/11/2023

AUDIENCE PROFILE:

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.

PREREQUISITES FOR PARTICIPATION:

Very Good knowledge of Microsoft Excel.

TRAINING LANGUAGE:

Greek or English

TRAINING MATERIALS:

Step by Step training materials in the English Language

METHODOLOGY:

Lecture, discussion, demonstration and practice.

**COURSE OBJECTIVES:** 

Upon completion of this course the participants will:

- 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.
- Create paginated reports in Power BI





# Analyzing Data with Power BI (DA-100T00-AC)

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. Finally, this course will show how to build paginated reports within the Power BI service and publish them to a workspace for inclusion within Power BI.





Thursday,30/11/2023, 8:15 - 16:00 Friday 1/12/2023, 8:15 - 16:00 Thursday, 7/12/2023, 8:15 - 16:00 Friday, 8/12/2023, 8:15 - 16:00



#### **PARICIPATION COST:**

The cost incudes the course notes and certificate. In the event of classroom led training, coffee, snacks and lunch (only for full day courses) are offered complimentary.

#### **Participation Cost**

Total Cost: €770,00
 HRDA Subsidy: €476,00
 Net Cost: €294,00

#### For Unemployed

• Please contact us





# **Analyzing Data with Power BI**

#### COURSE TOPICS

#### **Module 1**

#### **Get Started with Microsoft Data Analytics**

#### Lessons

- Data Analytics and Microsoft
- Getting Started with Power BI

#### Lab: Getting Started

Getting Started

#### Module 2

#### **Prepare Data in Power BI**

#### Lessons

- Get data from various data sources
- Optimize performance
- · Resolve data errors

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

Prepare Data

#### Module 3

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

- Data shaping
- · Enhance the data structure
- Data Profiling

#### Lab: Transforming and Loading Data

Loading Data

#### **Module 4**

#### Design a Data Model in Power BI

#### Lessons

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

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

- Create Model Relationships
- Configure Tables
- Review the model interface
- Create Quick Measures

## Lab: Advanced Data Modeling in Power BI Desktop

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

#### Module 5

#### **Create Model Calculations using DAX in Power BI**

#### Lessons

- Introduction to DAX
- DAX context
- 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

#### Module 6

#### Lessons

- · Optimze the model for performance
- Optimize DirectQuery Models
- Create and manage Aggregations

#### Module 7

#### **Create Reports**

#### Lessons

- Design a report
- Enhance the report

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

- Create a live connection in Power BI Desktop
- Design a report
- Configure visual fields adn 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

#### Unit 8

#### **Create Dashboards**

#### Lessons

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





# **Analyzing Data with Power BI**

#### **COURSE TOPICS**

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

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

#### Module 9

# Create Paginated Reports in Power BI Lessons

- Paginated report overview
- Create Paginated reports

#### Lab: Creating a Paginated report

- Use Power BI Report Builder
- Design a multi-page report layout
- Define a data source
- Define a dataset
- Create a report parameter
- · Export a report to PDF

#### Module 10

#### **Perform Advanced Analytics**

#### Lessons

- Advanced Analytics
- Data Insights through AI visuals

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

- Create animated scatter charts
- Use teh visual to forecast values
- Work with Decomposition Tree visual
- Work with the Key Influencers visual

#### Module 11

#### **Create and Manage Workspaces**

#### Lessons

- Creating Workspaces
- Sharing and Managing Assets

#### Lab: Publishing and Sharing Power BI Content

- Map security principals to dataset roles
- Share a dashboard
- Publish an App

#### Module 12

#### Manage Datasets in Power BI

#### Lessons

- Parameters
- Datasets

#### Module 13

#### **Row-level security**

#### Lessons

Security in Power BI