

# Microsoft Power BI Data Analyst Certification (PL-300)

ALL-IN-ONE: EXAMINATION INCLUDED IN PRICE

3 days (21 hours)

## Presentation

Immerse yourself in the world of Power BI with our Microsoft-certified Data Analyst training course. You'll learn how to transform raw data into visually striking, comprehensible, decision-making dashboards. This structured course prepares you for the PL-300 exam, while giving you autonomy over the entire Power BI ecosystem.

You'll start with the basics: the analyst's role, Power BI architecture, and your first steps in the tool. From the very first modules, you'll know how to connect to your sources, explore and cleanse them, and structure your data efficiently with Power Query.

Then you'll move on to business modeling, learning how to design robust relational models and create metrics with DAX. You'll understand how to structure your data to enable dynamic, scalable and rapid analysis.

On the visualization side, you'll learn how to create clear, interactive and engaging reports. Filters, indicators, linked pages, UX-friendly navigation: everything you need to make your data speak with impact and elegance.

As with all our training courses, this one will be presented with the latest updates for [PL-300](#) certification.

## Objectives

- Describe the Power BI report creation cycle, from connection to publication
- Establish connections to various data sources and prepare data with Power Query
- Cleanse, transform and combine data to build a solid analytical model

- Create calculated columns, DAX measures and relevant business indicators
- Build interactive, visually clear reports tailored to end-users
- Publish, share and update reports via Power BI Service with guaranteed security and collaboration

## Target audience

- Management controllers
- Data analysts
- Business Analysts
- IT specialists

## PREREQUISITES

- Good knowledge of Excel, in particular calculation functions, lists, pivot tables and charts

## SOFTWARE PREREQUISITES (FOR IN-HOUSE TRAINING)

- Installing an Office 365 account with a Power BI online license
- Install Power Bi Desktop

## Microsoft Power BI Data Analyst certification training program

### Introduction to Power BI and data analysis

- Key missions and responsibilities
- Expected technical and analytical skills
- Power BI Desktop vs Power BI Service
- Microsoft Power Platform ecosystem
- Typical use scenarios
- Connection > Transformation > Modeling > Visualization > Publication
- Integration with Excel, Azure, SQL Server, etc.

### Preparing data

- Supported sources: Excel, SQL, Web, SharePoint, etc.
- Connections in Import, DirectQuery and Live modes
- Source settings
- Remove duplicates and errors

- Modify data types
- Using conditional columns
- Merging and adding queries
- Split and rotate columns
- Grouping and aggregating data
- M language basics
- Modify steps in the formula bar
- Manual query editing

## Modeling data

- Fact tables vs. dimension tables
- Table relationships (cardinality, filter direction)
- Diagram view and model optimization
- Calculated vs. measured columns
- Basic functions: SUM, AVERAGE, COUNT, CALCULATE
- Filter and context functions
- Creation of temporal and geographical hierarchies
- Sorting order for custom fields
- Good modeling practices
- Column and row reduction
- Using date tables

## View data

- Types of visuals (bar charts, lines, maps, gauges, KPIs, etc.)
- Choice of visualizations according to data
- Using pages and bookmarks
- Report/page/visual level filters
- Segments, slicers, drill-down
- Interaction between visuals
- Themes and color palettes
- Conditional formatting
- Tooltips and page navigation
- User-centered design

## Analyze data

- Moving averages and spreads
- Trendlines and warning zones
- Time comparisons
- Building performance indicators
- Target values, deviations, dynamic objectives
- Top N, clustering and automatic grouping
- Time functions
  - YTD
  - MTD
  - QTD
  - SAMEPERIODLASTYEAR

## Deploy and maintain Power BI solutions

- Publishing from Power BI Desktop
- Create dashboards from multiple reports
- Using workspaces
- Roles and access levels
- Line-level security (RLS)
- Internal vs. external sharing
- Setting up data gateways
- Automatic scheduled updates
- Tracking update errors

## Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

## Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

## Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

## Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

## Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

## Sanction

A certificate will be issued to each trainee who completes the course.