

How to Pass the PL-300 Power BI Certification

Learn Power BI online at www.DataCamp.com

How to Use this Cheat Sheet

All the skills you need to pass PL-300 are listed here. If you are just considering taking the exam, read through the skills to see what you'll be working on.

If you are already working toward PL-300, find skills that you want to work on, then look up the content you need to take to gain those skills.

What is the PL-300 Certification?

PL-300 is a professional certification in Microsoft Power BI for people working as (or wishing to work as) a data analyst or business analyst. The exam tests you in four areas:

- 25–30%

 Preparing data
- 25–30%

 Modeling data
- 25–30%

 Visualizing and analyzing data
- 15–20%

 Managing and securing Power BI

Skills as measured from 20 April 2026. A score of 700 or higher passes; the credential renews each year through a free assessment on Microsoft Learn.

Prepare the Data

Preparing data means importing, cleaning, and manipulating data to get it ready for analysis.

Get or connect to data

Power BI connects to over 100 data sources, from spreadsheets to databases to web pages. You need to know how to get data from the source into Power BI.

- ☐ Identify and connect to data sources or a shared semantic model
- ☐ Change data source settings, including credentials and privacy levels
- ☐ Choose between Direct Lake, DirectQuery, and Import
- ☐ Create and modify parameters

Profile and clean the data

Datasets are seldom clean when you get them. You need to know how to detect and rectify issues with data.

- ☐ Evaluate data, including data statistics and column properties
- ☐ Resolve inconsistencies, unexpected or null values, and data quality issues
- ☐ Resolve data import errors

Transform and load the data

Even clean data often needs manipulating into a form suitable for analysis — new columns from existing ones, a subset of the rows, or tables combined.

- ☐ Select appropriate column data types
- ☐ Create and transform columns
- ☐ Group and aggregate rows
- ☐ Pivot, unpivot, and transpose data
- ☐ Convert semi-structured data to a table
- ☐ Create fact tables and dimension tables
- ☐ Identify when to use reference or duplicate queries and the resulting impact
- ☐ Merge and append queries
- ☐ Identify and create appropriate keys for relationships
- ☐ Configure data loading for queries

Model the Data

Data modeling is about defining what goes into each table and how the tables are related. (Not to be confused with statistical modeling, which is about inference and predictions.)

Design and implement a data model

The first step in data modeling is specifying the structure of each table and how the tables relate.

- ☐ Configure table and column properties
- ☐ Implement role-playing dimensions
- ☐ Define a relationship's cardinality and cross-filter direction
- ☐ Create a common date table
- ☐ Identify use cases for calculated columns and calculated tables

Create model calculations by using DAX

The ability to perform useful analytics hinges on the ability to create useful measures from the data. Power BI has an entire programming language to help you: DAX.

- ☐ Create single aggregation measures
- ☐ Use the CALCULATE function to manipulate filters
- ☐ Implement time intelligence measures
- ☐ Use basic statistical functions
- ☐ Create semi-additive measures
- ☐ Create a measure by using quick measures
- ☐ Create calculated tables or columns
- ☐ Create calculation groups

```
Sales EU =  
CALCULATE(  
    SUM(Sales[Amount]),  
    Region[Continent] = "Europe"  
)
```

Optimize model performance

If a dashboard or report runs slowly, you may need to change the data or the calculations to improve the speed.

- ☐ Improve performance by identifying and removing unnecessary rows and columns
- ☐ Identify poorly performing measures, relationships, and visuals by using Performance Analyzer and DAX query view
- ☐ Improve performance by reducing granularity

Manage and Secure Power BI

Once you have your report, you need to make it available to your users, keep it up to date, and control who can see what.

Create and manage workspaces and assets

Power BI workspaces let you manage reports, dashboards, and semantic models; scheduled refresh keeps the data current.

- ☐ Create and configure a workspace
- ☐ Configure and update an app
- ☐ Publish, import, or update items in a workspace
- ☐ Create dashboards
- ☐ Choose a distribution method
- ☐ Configure subscriptions and data alerts
- ☐ Promote or certify Power BI content
- ☐ Identify when a gateway is required
- ☐ Configure a semantic model scheduled refresh

Visualize and Analyze the Data

Data visualization and crunching numbers are the heart of data analysis. Once you have answers, the results need to be organized into a report for consumption.

Create reports

At a basic level, you create the text, metrics, and visualizations, then arrange them in a suitable order.

- ☐ Select an appropriate visual
- ☐ Format and configure visuals
- ☐ Create a narrative visual with Copilot
- ☐ Apply and customize a theme
- ☐ Apply conditional formatting
- ☐ Apply slicing and filtering
- ☐ Use Copilot to create a new report page, and to suggest content for it
- ☐ Configure the report page
- ☐ Choose when to use a paginated report
- ☐ Create visual calculations by using DAX

Enhance reports for usability and storytelling

A report's effectiveness is largely about how many useful and interesting thoughts its users have after seeing it.

- ☐ Configure bookmarks
- ☐ Create custom tooltips
- ☐ Edit and configure interactions between visuals
- ☐ Configure navigation for a report
- ☐ Apply sorting to visuals
- ☐ Configure sync slicers
- ☐ Group and layer visuals by using the Selection pane
- ☐ Configure drillthrough navigation, including pages, filters, and buttons
- ☐ Configure export settings
- ☐ Design reports for mobile devices
- ☐ Enable personalization in a report, including personalized visuals
- ☐ Design and configure Power BI reports for accessibility
- ☐ Configure automatic page refresh

Identify patterns and trends

Beyond descriptive statistics, analysis involves many techniques to answer questions with data, from finding related data points with cluster analysis to making predictions with forecasting.

- ☐ Use the Analyze feature in Power BI
- ☐ Use grouping, binning, and clustering
- ☐ Use AI visuals
- ☐ Use reference lines, error bars, and forecasting
- ☐ Detect outliers and anomalies
- ☐ Use Copilot to summarize the underlying semantic model

Secure and govern Power BI items

- ☐ Assign workspace roles
- ☐ Configure item-level access
- ☐ Configure access to semantic models
- ☐ Implement row-level security roles
- ☐ Configure row-level security group membership
- ☐ Apply sensitivity labels

Pass the PL-300 Certification with DataCamp

TRACK

Data Analyst in Power BI

This career track takes you from zero to certification-ready. It consists of 17 courses covering content related to the skills tested by PL-300. The average completion time is around 50 hours.

Complete the track to earn a 50% discount code for PL-300.

🕒 50 hours 📖 17 courses

Start Here

Introduction to Power BI

Master the Power BI basics and learn to use the data visualization software to build impactful reports.

🕒 3 hours ▶ 14 videos 📖 40 exercises

Data Preparation

Data Preparation in Power BI

In this interactive course, you'll learn how to use Power Query Editor to transform and shape your data to be ready for analysis.

🕒 3 hours ▶ 9 videos 📖 26 exercises

Data Transformation in Power BI

You'll learn how to (un)pivot, transpose, append and join tables. Gain power with custom columns, M language, and the Advanced Editor.

🕒 3 hours ▶ 9 videos 📖 28 exercises

Data Modeling

Data Modeling in Power BI

Learn the key concepts of data modeling in Power BI.

🕒 3 hours ▶ 9 videos 📖 26 exercises

Intermediate Data Modeling in Power BI

Master data modeling in Power BI.

🕒 3 hours ▶ 14 videos 📖 24 exercises

DAX Calculations

Introduction to DAX in Power BI

Enhance your Power BI knowledge by learning the fundamentals of Data Analysis Expressions (DAX) such as calculated columns, tables, and measures.

🕒 2 hours ▶ 7 videos 📖 20 exercises

DAX Functions in Power BI

Data Analysis Expressions (DAX) allow you to take your Power BI skills to the next level by writing custom functions.

🕒 3 hours ▶ 9 videos 📖 26 exercises

Intermediate DAX in Power BI

Discover a wide range of DAX calculations and learn how to use them in Microsoft Power BI.

🕒 3 hours ▶ 9 videos 📖 25 exercises

Use Cheat Sheets to Refer Back to What You Learned

[Power BI Cheat Sheet](#)

[DAX Cheat Sheet](#)

Visualization & Reporting

Data Visualization in Power BI

Power BI is a powerful data visualization tool that can be used in reports and dashboards.

🕒 3 hours ▶ 9 videos 📖 27 exercises

User-Oriented Design in Power BI

Learn how to design Power BI visualizations and reports with users in mind.

🕒 3 hours ▶ 9 videos 📖 26 exercises

Reports in Power BI

Take your Power BI visualizations up a level with the skills you already have. Learn alternative data storytelling techniques to simply building dashboards.

🕒 3 hours ▶ 9 videos 📖 28 exercises

Report Design in Power BI

Design reports people want to use — layout, navigation, and polish for real audiences.

🕒 3 hours ▶ 9 videos 📖 28 exercises

Analysis

Exploratory Data Analysis in Power BI

Enhance your reports with Power BI's Exploratory Data Analysis. Learn what EDA is for Power BI and how it can help you extract insights from your data.

🕒 3 hours ▶ 9 videos 📖 26 exercises

Trend Analysis in Power BI

Enhance your reports with trend analysis techniques such as time series, decomposition trees, and key influencers.

🕒 3 hours ▶ 9 videos 📖 25 exercises

Deployment

Data Connections in Power BI

Discover the different ways you can enhance your Power BI data importing skills.

🕒 2 hours ▶ 9 videos 📖 24 exercises

Deploying and Maintaining Assets in Power BI

Learn how to deploy and maintain assets in Power BI. You'll get to grips with the Power BI Service interface and key elements in it like workspaces.

🕒 2 hours ▶ 8 videos 📖 26 exercises

Apply Your Skills With Case Studies

To make sure that you have mastered the Power BI skills needed for the exam, take these case study courses.

[Case Study: Analyzing Customer Churn in Power BI](#)

[Case Study: Analyzing Job Market Data in Power BI](#)

[Case Study: HR Analytics in Power BI](#)

[Case Study: Competitor Sales Analysis in Power BI](#)

[Case Study: Inventory Analysis in Power BI](#)

Schedule Your PL-300 Exam

Once you feel ready, redeem your discount code and schedule your exam via the [Microsoft certification page](#).