

Microsoft Azure Certified Data & AI Track

# PL-300 Guide: Microsoft Power BI Data Analyst

November 2022

# Table of Contents

## Introduction to the PL-300

Introduction	3
Why complete the PL-300 and learn Power BI?	3

## Learning materials for the PL-300

Mandatory learning materials	4
Training Days	5
Business Case	5
Additional learning materials	5

## How to prepare for the PL-300

Scheduling your exam	7
Preparing for the exam	7
What to expect from the exam?	8

## Questions?

Where to go with questions?	9
-----------------------------	---

### Links

Bold underlined text in Plum color is a clickable link. **[I am a link, click me!](#)**

# Introduction to the PL-300

Here you will learn more about the PL-300 and why it is an important topic to learn.

## Introduction to the PL-300

Welcome to the beginning of your Data Analyst journey! During the PL-300 course, you will learn to cleanse and transform data, so that it is ready to be analyzed. You will also learn to efficiently design and build scalable data models. As a data analyst, your main task is to enable companies to get the most out of their data. Therefore, you will exercise your analytical capabilities to provide meaningful business value through data visualizations. The tool you will learn to do this with is Microsoft Power BI.

After completing this course, you will know how to prepare and model data, use it to create easy-to-understand visualizations, and deploy and maintain assets to help businesses navigate their data. The PL-300 exam is required to earn the [Power BI Data Analyst Associate certification](#). As an exam candidate, you should be proficient using [Power Query](#) and writing expressions using [DAX](#), but more on that in the Power BI Tool Guide. If you want to know more about the certification, check out the [official Microsoft guide](#).

## Why complete the PL-300 and learn Power BI?

"Power BI is at the leading edge of innovation at Microsoft and is a recognized industry leader in Analytics and BI Platforms. Over 97% of Fortune 500 companies are using Power BI today [...] helping customers large and small drive a data culture for everyone, in every decision and at any scale."

– **Microsoft**

Power BI is a business analytics solution that lets you visualize your data and share insights across your organization, or embed them in your app or website. Within the tool, there are multiple products and services that help an organization make data-driven decisions. Check out the Power BI Guide to learn more about how to install, learn and use this tool.

### Why is obtaining this certification important?

A Power BI data analyst delivers practical insights by making use of available data and applying domain expertise. After you obtain this certification, you will know how to provide meaningful business value through easy-to-comprehend data visualizations, enable others to perform predictions, and deploy and configure solutions for various business situations. The certificate will prove you are an important asset who can collaborate with stakeholders to make the most out of data.

## Helpful Definitions

### Power Query

Power Query is a Microsoft tool aimed at extracting, transforming and loading data from a wide range of sources.

### DAX

Data Analysis Expressions (DAX) is a library of functions and operators that can be combined to build formulas and expressions.

*You can find more information in the Power BI guide.*

# Learning materials for the PL-300

Here you will learn more about learning materials for the PL-300.

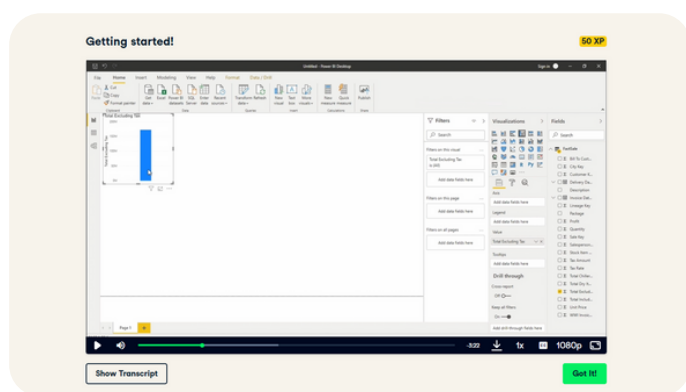
## What to learn

In this section, we'll cover the mandatory learning materials that prepare you for the PL-300. In a later section, we will also share some recommendations for additional resources that you can use to expand your knowledge.

## Mandatory learning materials

To help you learn the hard skills needed as a Microsoft data professional, we will use the tools listed below. For more information about these tools, check out our Starter Guide which can be found in the file folder of the general channel.

### DataCamp

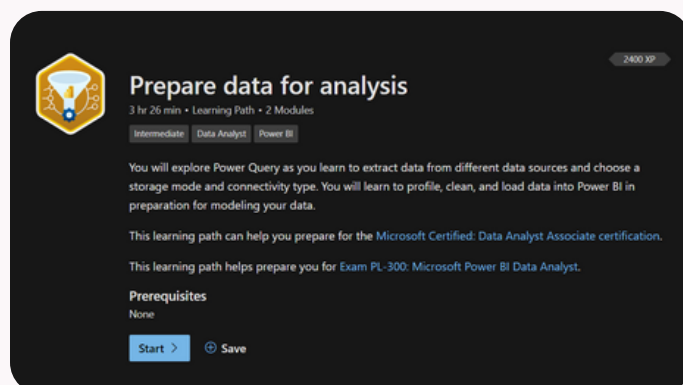


DataCamp is an interactive learning platform for data science. Through DataCamp, you can learn programming languages like Python and SQL through over 100 expert-taught courses. With its in-browser coding exercises, hands-on projects, and gamification features, DataCamp is the favorite learning platform of many Techionistas. After starting at the Techionista Academy, you will receive login details for DataCamp, giving you access to all their premium content during the track. For the PL-300 course, you'll have to complete these 4 DataCamp modules:

- [DataCamp: Introduction to Power BI](#)
- [DataCamp: Data Modeling in Power BI](#)
- [DataCamp: Introduction to DAX in Power BI](#)
- [DataCamp: DAX Functions in Power BI](#)
- [DataCamp: Intermediate DAX Functions in Power BI](#)

- [DataCamp: Case Study: Analyzing Consumer Churn in Power BI](#)
- [DataCamp: Case Study: HR Analytics in Power BI](#)

### Microsoft Learn

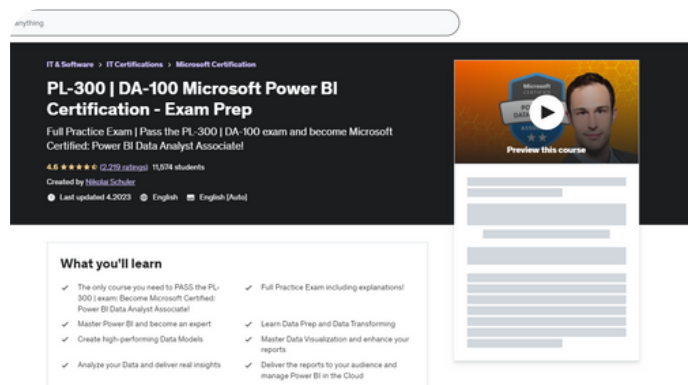


Microsoft Learn provides free interactive, hands-on training content continuously updated by Microsoft. This is especially useful when preparing for Microsoft Certifications, as you can be confident that you are always learning the latest updated content. With over 1000+ courses available on the platform, you can learn a variety of topics. Microsoft Learn offers single modules and learning paths that combine single modules, allowing you to follow a step-by-step learning journey.

The learning path that you will complete for the PL-300 looks like this:

- [Microsoft Learn: Getting started with Microsoft data analytics](#)
- [Microsoft Learn: Prepare data for analysis](#)
- [Microsoft Learn: Model data in Power BI](#)
- [Microsoft Learn: Visualize data in Power BI](#)
- [Microsoft Learn: Data analysis in Power BI](#)
- [Microsoft Learn: Manage workspaces and datasets in Power BI](#)

## Udemy



Udemy offers online on-demand courses in video format for many topics, including the Microsoft certification exams.

The course that we've selected for the PL-300 is the: [PL-300 | DA-100 Microsoft Power BI Certification - Exam Prep](#) by Nikolai Schuler. This course includes practice tests and demo resources and will help you-

- Become an expert in everything PowerBI
- Learn data analysis and data transformations
- Create high-performing data models
- Master data visualization to enhance your reports
- Deliver real business insights
- Deliver the reports to your audience and manage Power BI in the Cloud..

## Training days with a Microsoft Certified Trainer

To make sure you have the chance to ask all your questions to a Microsoft Certified Trainer, we also organize training days for the PL-300. You will attend a 'Building a Professional Dashboard' session and an Exam Preparation session with Microsoft Certified Trainers.

## Business Case

But of course, you also want to get meaningful real-world-like experience. That's why, during this block, you're going to make your first business case with real data from a company. During the business case, you will apply all your knowledge and present your report/dashboard to the other Techionistas.

Not only will the business case help you put your theoretical knowledge to the test, it will also prepare you for work experiences that you may face in the future. To ensure that you practice with effective communication and collaboration, you won't be doing the business case alone, but in a team. You will also be preparing for working under time pressure and with a limited budget, that is why you will be doing the business case with in less than 5 working days with a set budget. As this is an essential part of the challenge, we won't be giving you any details on the business case yet, but stay tuned, because it will be a great adventure. ;)

## Additional learning materials

Next you will find some additional informative resources that will help you with your Data Analyst exam.

- [This interactive cheat sheet](#) from Microsoft tells you everything you need to know about visualizations. This is useful beyond your exam preparation, as it is a guide on how to pick the best visualization method tailored for each type of data.
- ["Guy in a Cube"](#): With this YouTube channel, you get answers to all your Power BI-related questions. We highly recommend the playlist ["Getting started with Power BI"](#). In this playlist, Adam provides a holistic explanation of what Power BI is; from the Power BI Desktop to the Power BI service and the mobile app. Another playlist we recommend is the ["How and Why of Power BI Aggregations"](#), in which you will learn how and why Power BI Aggregations can help your data model be more efficient. Lastly, we recommend ["Power BI data modelling best practices"](#) in which Adam shows how to reduce the size of your Power BI dataset. This could potentially save you a lot of space and improve refresh times along with report performance.

- We can imagine that the last time you've had a math or statistics class might be quite a while ago! Therefore we like to share this [Khan Academy Statistics Course](#) with you! FYI: Khan Academy is a wonderful platform where you can educate yourself by following interactive courses that cover a wide range of topics. Check it out!
- You've worked in Power BI as part of your training and made some professional dashboards. As hands-on is a very useful learning process, you can brush up your data analysis skills by playing around with new datasets at the [Data Playground](#). Some of these contain real-life data, so you'll get to practice cleaning messy data.
- For a quick recap, Microsoft has a playlist of 4 short videos that provide a summary of the PL-300 exam. You can check them out if you need a refresher before the exam day. Check out the [Exam Readiness Zone](#).
- [Kaggle](#) is a platform where Data Scientists, Data Analysts, or Data Engineers can download public datasets to practice with, participate in various competitions and solve data science issues. You can also use Kaggle to download datasets that you can then use in tools such as Power BI – Kaggle.

# How to prepare for the PL-300

Here you will learn more about how to study and prepare for the PL-300 exam.

## What will the exam test?

This exam measures your ability to accomplish the following technical tasks: prepare the data; model the data; visualize and analyze the data; and deploy and maintain assets. For a detailed description of what the exam tests, have a look at “skills measured” in the [PL-300 Exam Study Guide \(microsoft.com\)](#).

## Scheduling your exam

### When to schedule your exam?

It is important that you stay on track so that you can keep up with the live training sessions. Therefore, we recommend you to schedule your PL-300 exam after the exam prep session. Based on the overall schedule, we always share a recommended date to take your exam from our side. However, it is good to keep in mind that you should only schedule the exam when you are ready to take it, as this will increase your chances of passing.

If you are not ready to take it before continuing to the next block or if you failed the exam, please reach out to your Data & AI Mentor/Coach to discuss individual next steps.

### How to schedule your exam?

You will receive an exam voucher from Techionista with which you can schedule your exam free of charge. This voucher can be used only once and has to be used before the expiration date of that voucher. After the voucher expires, you can no longer use it. Therefore, it is important that you schedule your exam before the expiration date. You can schedule your exam quite far in the future, so you can make use of this if you do not feel quite ready yet. If you unexpectedly won't be able to take the exam on this date, you can then reschedule (have a look at the Microsoft website for the specific rules as these do change from time to time).

You can schedule your exam yourself with Pearson VUE, a provider of global computer-based tests. Pearson VUE provides licensure and certifications exams for companies such as Microsoft, Cisco, Oracle, HP and many more. You will find step-by-step instructions on how to schedule your exam using Pearson VUE in the [Pearson VUE guide](#). You will need to be logged into your Techionista account to access this guide.

## Preparing for the exam

Once you have committed to a date and scheduled your exam, it is time to start preparing for it! Our best advice? Practice, practice, practice! We recommend that you practice with as many exam questions that you can get your hands on. Start with MeasureUp, the official Microsoft Exam Practice Tool that helps you prepare for Microsoft Exams Certifications. Check out the O1. Measure Up and Pearson VUE channel in Teams for more info.



# What to expect during the exam?

## Where will you take the exam?

You can take the online version of the exam from your home/office. Alternatively, you can arrange to take the exam in an official Microsoft exam center when registering for the exam.

## What will the exam look like?

You can explore the exam environment by visiting the [Microsoft exam sandbox](#). In the sandbox, you can interact with different question types, such as build list, case studies, and others that you might encounter in the user interface when you take an exam. Additionally, it includes the introductory screens, instructions, and help topics related to the different types of questions that your exam might include. It also includes the non-disclosure agreement that you must accept before you can launch the exam.

## When do you pass the exam?

All technical exam scores are reported on a scale of 1 to 1,000. A passing score is 700 or greater. As this is a scaled score, it may not equal 70% of the points. A passing score is based on the knowledge and skills needed to demonstrate competence, as well as the difficulty of the questions.

When answering most multipart questions, you'll receive one point for each correctly answered component. You can earn all, some, or none of the points possible for that question. If a question is worth more than one point, it will be noted in the question. Usually, you'll receive one point for each correctly answered component.

After your submission, your result will be declared within a few minutes. Your scorecard will contain details including overall performance in the exam, PASS/FAIL status, a bar chart demonstrating your performance in key areas of the exam, together with the instructions on exam results interpretation.

To learn more about:

- [Microsoft exam scores](#)
- [Exam duration, breaks, and question types](#)
- [Register and schedule an exam](#)
- [Testing your computer's specifications](#)
- [Exam policies and FAQs](#)



# Questions & where to go for help

Here you will find more information about where to ask questions and find help.

## Where to go with questions?

A part of becoming a data analyst, data engineer, or data scientist is having good problem solving skills. Throughout the track you may run into situations where you feel stumped and need help finding an answer. In order to practice great problem solving skills there are a few avenues of support we recommend trying before using the Question Form provided by Techionista. Here are the avenues available to you that can help you find answers to many problems:

### Your favorite search engine

Google (or your favorite search engine) will be your best friend during this track! If you find yourself stuck, the possibility of finding your answer online is high and we always recommend starting there. You would also be surprised by how many data experts use the internet to search for answers on a daily basis!

### Your fellow Techionistas

If you still can't find the answer you are looking for on the internet or via one of the learning materials provided, check with your study group or the other members in your cohort! Chances are someone may have the answer to your question or there are other people in the group who also are wondering the same thing! You can work together to share knowledge and find answers, which are also important skills to have: teamwork and collaboration!

### Live training days

Come prepared for live training days with your hard skills questions! The best time and place to get your questions answered is by our great instructors. During live training days there is always enough time to answer your remaining questions!

### Weekly Open Coffees

If you have general questions about the track's schedule or assignments, the Open Coffee is a great place to ask! During Open Coffees we provide you with an overview of the upcoming weeks and have plenty of time for questions!

### Questions Form

If you are unable to find an answer to your question, please don't hesitate to ask the Techionista Team! Whether it's about the hard skills, career skills, schedule, or a personal issue, please reach out via the [Question Form](#). The Question Form then is routed to the rest team member for your question and you will receive a response via a MS Teams message within two working days.