



DP-100: Designing and Implementing a Data Science Solution on Azure

Microsoft - Data & AI

- **Nível:** Intermédio
 - **Duração:** 28h
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Sobre o curso

Learn how to operate machine learning solutions at cloud scale using Azure Machine Learning. This course teaches you to leverage your existing knowledge of Python and machine learning to manage data ingestion and preparation, model training and deployment, and machine learning solution monitoring in Microsoft Azure.

Destinatários

This course is designed for data scientists with existing knowledge of Python and machine learning frameworks like Scikit-Learn, PyTorch, and Tensorflow, who want to build and operate machine learning solutions in the cloud.

Pré-requisitos

Successful Azure Data Scientists start this role with a fundamental knowledge of cloud computing concepts, and experience in general data science and machine learning tools and techniques. Specifically:

- Creating cloud resources in Microsoft Azure.
- Using Python to explore and visualize data.
- Training and validating machine learning models using common frameworks like Scikit-Learn, PyTorch, and TensorFlow.
- Working with container

If you are completely new to data science and machine learning, please complete [Microsoft Azure AI](#)

[Fundamentals](#) first.

Programa

- Explore and configure the Azure Machine Learning workspace
- Experiment with Azure Machine Learning
- Optimize model training with Azure Machine Learning
- Manage and review models in Azure Machine Learning
- Deploy and consume models with Azure Machine Learning
- Develop generative AI apps in Azure AI Foundry portal

Explore and configure the Azure Machine Learning workspace

- Explore Azure Machine Learning workspace resources and assets
- Explore developer tools for workspace interaction
- Make data available in Azure Machine Learning
- Work with compute targets in Azure Machine Learning
- Work with environments in Azure Machine Learning

Experiment with Azure Machine Learning

- Find the best classification model with Automated Machine Learning
- Track model training in Jupyter notebooks with MLflow

Optimize model training with Azure Machine Learning

- Run a training script as a command job in Azure Machine Learning
- Track model training with MLflow in jobs
- Perform hyperparameter tuning with Azure Machine Learning
- Perform hyperparameter tuning with Azure Machine Learning

Manage and review models in Azure Machine Learning

- Register an MLflow model in Azure Machine Learning
- Create and explore the Responsible AI dashboard for a model in Azure Machine Learning

Deploy and consume models with Azure Machine Learning

- Deploy a model to a managed online endpoint
- Deploy a model to a batch endpoint

Develop generative AI apps in Azure AI Foundry portal

- Plan and prepare to develop AI solutions on Azure
- Explore and deploy models from the model catalog in Azure AI Foundry portal
- Develop an AI app with the Azure AI Foundry SDK
- Get started with prompt flow to develop language model apps in the Azure AI Foundry