

# DP-100T00-A: Designing and implementing a data science solution on Azure

### **Course Duration: 4 days (32 hours)**

### Level: Intermediate

### Overview

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 with Azure Machine Learning and MLflow.

### Audience

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 with Azure Machine Learning and MLflow.

## **Course Syllabus**

- Learning Path 1: 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
  - o Work with environments in Azure Machine Learning
- Learning Path 2: Experiment with Azure Machine Learning
  - Find the best classification model with Automated Machine Learning
  - Track model training in Jupyter notebooks with MLflow
- Learning Path 3: 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
  - Run pipelines in Azure Machine Learning



- Learning Path 4: 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
- Learning Path 5: Deploy and consume models with Azure Machine Learning
  - Deploy a model to a managed online endpoint
  - o Deploy a model to a batch endpoint



## **DP-100T00-A: Designing and implementing a data science solution on Azure**

### **Course Overview**

Ready to take your data science skills to the cloud? The DP-100T00-A: Designing and Implementing a Data Science Solution on Azure course is built for data professionals who want to harness the power of Microsoft Azure to build, train, and deploy machine learning models at scale.

This hands-on course takes you through the full data science lifecycle — from defining the problem and preparing your data to training models and operationalizing solutions using Azure Machine Learning (Azure ML). You'll work with real tools, real data, and real scenarios that reflect what's happening in today's data-driven world.

By the end of this course, you'll be ready to sit for the Microsoft Certified: Azure Data Scientist Associate (DP-100) certification — and more importantly, ready to build impactful AI and ML solutions in the cloud.

## **Mode Of Delivery**

### Public

- Live Training (Duration: 32Hours)
- Per Participant

## Self-paced

- Access to Microsoft content via Microsoft learn.
- Consultation with Trainers.
- Flexible video access.



- Access to exam preparation.
- Certificate of Completion.