



COURSE OUTLINE

DP-100T01

Designing and Implementing a Data Science Solution on Azure

DURATION	LEVEL	TECHNOLOGY		DELIVERY METHOD	TRAINING CREDITS
3 Days	Intermediate	Microsoft	Azure Data	ILT/VILT	N/A

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 in Microsoft Azure.

Prerequisites

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 containers To gain these prerequisite skills, take the following free online training before attending the course:
 - Explore Microsoft cloud concepts.
 - Create machine learning models.
 - Administer containers in Azure If you are completely new to data science and machine learning, please complete Microsoft Azure AI Fundamentals first.

Target Audience

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.

Job role

Data Scientist

Exam Requirements

DP-100

Course Topics

- Introduction to the Azure Machine Learning SDK
- Use Automated Machine Learning in Azure Machine Learning
- Create a classification model with Azure Machine Learning designer
- Train a machine learning model with Azure Machine Learning
- Work with Data in Azure Machine Learning
- Work with Compute in Azure Machine Learning
- Orchestrate machine learning with pipelines
- Deploy real-time machine learning services with Azure Machine Learning
- Deploy batch inference pipelines with Azure Machine Learning
- Tune hyperparameters with Azure Machine Learning
- Automate machine learning model selection with Azure Machine Learning
- Explore differential privacy
- Explain machine learning models with Azure Machine Learning
- Detect and mitigate unfairness in models with Azure Machine Learning
- Monitor data drift with Azure Machine Learning
- Monitor models with Azure Machine Learning