

Training: Microsoft

**DP-100T01 Designing and Implementing a Data Science Solution on Azure**Gold  
Microsoft Partner  


## TRAINING GOALS:

The Azure Data Scientist applies their knowledge of data science and machine learning to implementing and running machine learning workloads on Microsoft Azure; in particular, using Azure Machine Learning Service. This entails planning and creating a suitable working environment for data science workloads on Azure, running data experiments and training predictive models, managing and optimizing models, and deploying machine learning models into production.

### 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.

## CONSPECT:

- 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

## REQUIREMENTS:

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.

### Difficulty level



## CERTIFICATE:

Certificate of completing an authorized Microsoft training

## TRAINER:

Microsoft Certified Trainer