



Azure

DP-100T01: Designing and Implementing a Data Science Solution on Azure

\$2,595.00

- 4 Days

Upcoming Dates

Course Description

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.

Course Outline

Module 1: Doing Data Science on Azure

The student will learn about the data science process and the role of the data scientist. This is then applied to understand how Azure services can support and augment the data science process.

Lessons

- Introduce the Data Science Process
- Overview of Azure Data Science Options
- Introduce Azure Notebooks

Module 2: Doing Data Science with Azure Machine Learning service

The student will learn how to use Azure Machine Learning service to automate the data science process end to end.

Lessons

- Introduce Azure Machine Learning (AML) service
- Register and deploy ML models with AML service

Module 3: Automate Machine Learning with Azure Machine Learning service

In this module, the student will learn about the machine learning pipeline and how the Azure Machine Learning service's AutoML and HyperDrive can automate some of the laborious parts of it.

Lessons

- Automate Machine Learning Model Selection
- Automate Hyperparameter Tuning with HyperDrive

Module 4: Manage and Monitor Machine Learning Models with the Azure Machine Learning service

In this module, the student will learn how to automatically manage and monitor machine learning models in the Azure Machine Learning service.

Lessons

- Manage and Monitor Machine Learning Models

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.

Prerequisites

Before attending this course, students must have:

- Azure Fundamentals
- Understanding of data science including how to prepare data, train models, and evaluate competing models to select the best one.
- How to program in the Python programming language and use the Python libraries: pandas, scikit-learn, matplotlib, and seaborn.

What You Will Learn