



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

COURSE 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.

WHO WILL BENEFIT FROM THIS COURSE?

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:

- A fundamental knowledge of Microsoft Azure
- Experience of writing Python code to work with data, using libraries such as Numpy, Pandas, and Matplotlib.
- Understanding of data science; including how to prepare data, and train machine learning models using common machine learning libraries such as Scikit-Learn, PyTorch, or Tensorflow.

COURSE OBJECTIVES

Students will learn to:

- Design a machine learning solution
- Explore the Azure Machine Learning workspace
- Work with data in Azure Machine Learning
- Work with compute in Azure Machine Learning
- Automate machine learning model selection with Azure Machine Learning
- Use notebooks for experimentation in Azure Machine Learning
- Train models with scripts in Azure Machine Learning
- Optimize model training with pipelines in Azure Machine Learning
- Manage and review models in Azure Machine Learning
- Deploy and consume models with Azure Machine Learning



COURSE OUTLINE

Module 1: Design a machine-learning solution

- There are many options on Azure to train and consume machine learning models. Which service best fits your scenario can depend on a myriad of factors. Learn how to identify important requirements and when to use which service when you want to use machine learning models.

Module 2: Explore the Azure Machine Learning workspace

- Throughout this learning path you'll explore the Azure Machine Learning workspace. Learn how you can create a workspace and what you can do with it. You'll also explore the various developer tools you can use to interact with the workspace.

Module 3: Work with data in Azure Machine Learning

- Learn how to work with data in Azure Machine Learning. Whether you want to access data in notebooks or scripts, you can read data directly, through datastores, or data assets.

Module 4: Work with compute in Azure Machine Learning

- Learn how to work with compute targets and environments in the Azure Machine Learning workspace.

Module 5: Automate machine learning model selection with Azure Machine Learning

- Learn how to find the best model with automated machine learning (AutoML). Whether you're training a classification, regression, or forecasting model, you can use AutoML to quickly explore various featurization techniques and algorithms.

Module 6: Use notebooks for experimentation in Azure Machine Learning

- Learn how to use Azure Machine Learning notebooks for experimentation. Similar to Jupyter, the notebooks are ideal for exploring your data and developing a machine-learning model.

Module 7: Train models with scripts in Azure Machine Learning

- To prepare your machine learning workloads for production, you'll work with scripts. Learn how to train models with scripts in Azure Machine Learning.

Module 8: Optimize model training with pipelines in Azure Machine Learning

- Learn how to optimize and automate model training in Azure Machine Learning by using components and pipelines.

Module 9: Manage and review models in Azure Machine Learning

- Learn how to manage and review models in Azure Machine Learning by using MLflow to store your model files and using responsible AI features to evaluate your models.

Module 10: Deploy and consume models with Azure Machine Learning

- Learn how to deploy a model to an endpoint. When you deploy a model, you can get real-time or batch predictions by calling the endpoint.

WHY TRAIN WITH SUNSET LEARNING INSTITUTE?

Sunset Learning Institute (SLI) has been an innovative leader in developing and delivering authorized technical training since 1996. Our goal is to help our customers optimize their technology Investments by providing convenient, high quality technical training that our customers can rely on. We empower students to master their desired technologies for their unique environments.

What sets SLI apart is not only our immense selection of trainings options, but our convenient and consistent delivery system. No matter how complex your environment is or where you are located, SLI is sure to have a training solution that you can count on!

Premiere World Class Instruction Team

- All SLI instructors have a four-year technical degree, instructor level certifications and field consulting work experience
- Sunset Learning has won numerous Instructor Excellence and Instructor Quality Distinction awards since 2012

Enhanced Learning Experience

- The goal of our instructors during class is ensure students understand the material, guide them through our labs and encourage questions and interactive discussions.

Convenient and Reliable Training Experience

- You have the option to attend classes live with the instructor, at any of our established training facilities, or from the convenience of your home or office
- All Sunset Learning Institute classes are guaranteed to run – you can count on us to deliver the training you need when you need it!

Outstanding Customer Service

- You will work with a dedicated account manager to suggest the optimal learning path for you and/or your team
- An enthusiastic student services team is available to answer any questions and ensure a quality training experience

Interested in Private Group Training?

[Contact Us](#)