

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

### COURSE OVERVIEW

This course provides an overview of Azure services that support data science, with a focus on using Azure Machine Learning service to automate the data science pipeline. It is designed for Azure Data Scientists who already possess data science knowledge and are looking to apply their expertise to implement and manage machine learning workloads on Microsoft Azure. The course covers planning and setting up a suitable environment for data science workloads, running data experiments, training predictive models, optimizing and managing models, and deploying them into production using Azure Machine Learning Service.

### WHO SHOULD ATTEND?

The course is designed for data scientists, machine learning engineers, AI professionals, and IT specialists who want to implement and manage machine learning workloads on Microsoft Azure. It is also suitable for individuals preparing for the Microsoft Certified: Azure Data Scientist Associate certification. This course is ideal for those who already have a foundational knowledge of data science and are looking to enhance their skills in building, training, deploying, and optimizing machine learning models using Azure Machine Learning Service.

### COURSE OUTCOMES

Delegates will gain the skills and knowledge to:

- Understand Azure services that support data science and machine learning workloads.
- Implement and manage Azure Machine Learning service to build automated data science pipelines.
- Plan and configure suitable environments for data science workloads on Azure.
- Run data experiments and train predictive models using Azure Machine Learning.
- Manage and optimize machine learning models for improved performance.
- Deploy machine learning models into production environments on Azure.
- Monitor and maintain deployed models to ensure reliability and effectiveness.
- Prepare for the Microsoft Certified: Azure Data Scientist Associate certification exam.

### KEY COURSE HIGHLIGHTS

At the end of the course, you will understand;

- Overview of Azure Machine Learning.
- Data preparation techniques.
- Model training and evaluation.
- Automated ML and pipelines.
- Hyperparameter tuning.
- Model deployment and management.
- Monitoring and retraining models.
- Security and compliance in ML.
- Hands-on labs with Azure tools.
- Exam-focused content.

All our courses are dual-certificate courses. At the end of the training, the delegates will receive two certificates.

1. A GTC end-of-course certificate
2. Continuing Professional Development (CPD) Certificate of completion with earned credits awarded