

Course DP-201T01-A: Designing an Azure Data Solution



### **COURSE OVERVIEW**



**Course Modality** 

Classroom + hands-on labs



#### **Course Time**

2 days



Course Level

Intermediate



**Course Language** 

English

In this course, the students will design various data platform technologies into solutions that are in line with business and technical requirements. This can include on-premises, cloud, and hybrid data scenarios which incorporate relational, No-SQL or Data Warehouse data. They will also learn how to design process architectures using a range of technologies for both streaming and batch data.

The students will also explore how to design data security including data access, data policies and standards. They will also design Azure data solutions which includes the optimization, availability and disaster recovery of big data, batch processing and streaming data solutions.

### **Prerequisites:**

In addition to their professional experience, students who take this training should have technical knowledge equivalent to the following courses:

- ✓ Azure fundamentals
- ✓ DP-200: Implementing an Azure Data Solution

### **Intended Audience:**

The audience for this course is data professionals, data architects, and business intelligence professionals who want to learn about the data platform technologies that exist on Microsoft Azure.

The secondary audience for this course is individuals who develop applications that deliver content from the data platform technologies that exist on Microsoft Azure.



## **COURSE CURRICULUM**

#### Module 1:

#### **Data Platform Architecture Considerations**

In this module, the students will learn how to design and build secure, scalable and performant solutions in Azure by examining the core principles found in every good architecture. They will learn how using key principles throughout your architecture regardless of technology choice, can help you design, build, and continuously improve your architecture for an organizations benefit.

#### Lessons

- ✓ Core Principles of Creating Architectures
- ✓ Design with Security in Mind
- ✓ Performance and Scalability
- Design for availability and recoverability
- ✓ Design for efficiency and operations
- ✓ Case Study

#### Lab: Case Study

- ✓ Design with security in mind
- ✓ Consider performance and scalability
- Design for availability and recoverability
- ✓ Design for efficiency and operations

# After completing this module, students will be able to:

- ✓ Design with Security in mind
- ✓ Consider performance and scalability
- Design for availability and recoverability
- ✓ Design for efficiency and operations

#### Module 2:

# Azure Batch Processing Reference Architectures

In this module, the student will learn the reference design and architecture patterns for dealing with the batch processing of data. The student will be exposed to dealing with the movement of data from on-premises systems into a cloud data warehouse and how it can be automated. The student will also be exposed to an AI architecture and how the data platform can integrate with an AI solution.

#### Lessons

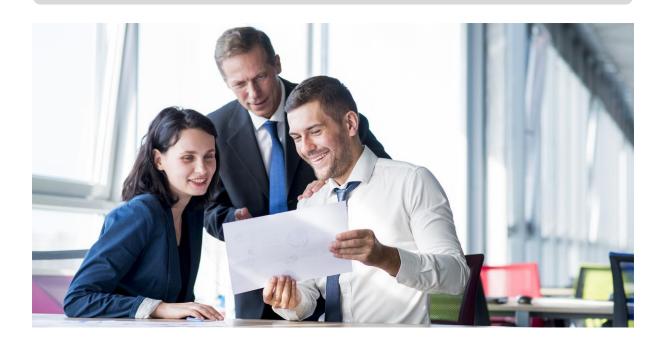
- ✓ Lambda architectures from a Batch Mode Perspective
- ✓ Design an Enterprise BI solution in Azure
- ✓ Automate enterprise BI solutions in Azure
- ✓ Architect an Enterprise-grade Conversational Bot in Azure

# Lab: Architect an Enterprise-grade Conversational Bot in Azure

- ✓ Designing an Enterprise BI solution in
- ✓ Automate an Enterprise BI solution in
- ✓ Automate an Enterprise BI solution in Azure



## **RECOMMENDED EXAMS**



## **Microsoft Certified: Azure Data Engineer Associate**

Classroom or Digital | 130 minutes