

## DP-201T01 - Designing an Azure Data Solution

### Overview

In this course, 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. Students will also learn how to design process architectures using a range of technologies for both streaming and batch data. 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.

### Prerequisite Comments

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

### Target 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 Objectives

Please refer to Overview.

### Course Outline

[Register Online](#)

### Schedule

Class Length: 2 Days

G2R = "Guaranteed to Run" | OLL = "Online LIVE"  
 ILT = "Instructor-Led-Training" | HDL = "Hosted Distance Learning"

11/12/20	G2R	6:00AM - 2:00PM	HDL - All Locations (Pacific Time)	HDL	\$1,190.00
11/12/20	G2R	6:00AM - 2:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$1,190.00
01/21/21	G2R	8:00AM - 4:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$1,190.00
01/21/21	G2R	8:00AM - 4:00PM	HDL - All Locations (Pacific Time)	HDL	\$1,190.00
03/04/21	G2R	6:00AM - 2:00PM	HDL - All Locations (Pacific Time)	HDL	\$1,190.00
03/04/21	G2R	6:00AM - 2:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$1,190.00
04/22/21	G2R	6:00AM - 2:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$1,190.00
04/22/21	G2R	6:00AM - 2:00PM	HDL - All Locations (Pacific Time)	HDL	\$1,190.00
06/10/21	G2R	8:00AM - 4:00PM	HDL - All Locations (Pacific Time)	HDL	\$1,190.00
06/10/21	G2R	8:00AM - 4:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$1,190.00

## 1 - Data Platform Architecture Considerations

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

## 2 - Azure Batch Processing Reference Architectures

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

## 3 - Azure Real-Time Reference Architectures

Lambda architectures for a Real-Time Perspective  
Lambda architectures for a Real-Time Perspective  
Design a stream processing pipeline with Azure Databricks  
Create an Azure IoT reference architecture  
Lab : Azure Real-Time Reference Architectures

## 4 - Data Platform Security Design Considerations

Defense in Depth Security Approach  
Network Level Protection  
Identity Protection  
Encryption Usage  
Advanced Threat Protection  
Lab : Data Platform Security Design Considerations

## 5 - Designing for Resiliency and Scale

Design Backup and Restore strategies  
Optimize Network Performance  
Design for Optimized Storage and Database Performance  
Design for Optimized Storage and Database Performance  
Incorporate Disaster Recovery into Architectures  
Design Backup and Restore strategies  
Lab : Designing for Resiliency and Scale

## 6 - Design for Efficiency and Operations

Maximizing the Efficiency of your Cloud Environment  
Use Monitoring and Analytics to Gain Operational Insights  
Use Automation to Reduce Effort and Error  
Lab : Design for Efficiency and Operations

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