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MICROSOFT

DP-201T01: Designing an Azure Data Solution

BONUS! Cyber Phoenix Subscription Included: All Phoenix TS students receive complimentary ninety (90) day access to the Cyber Phoenix learning platform, which hosts hundreds of expert asynchronous training courses in Cybersecurity, IT, Soft Skills, and Management and more!

Course Overview

Phoenix TS' 2-day instructor-led Microsoft Designing an Azure Data Solution training and certification boot camp in Washington, DC Metro, Tysons Corner, VA, Columbia, MD or Live Online teaches students how to 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, NoSQL, 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.

What You'll Learn

- Data Platform Architecture Considerations
- Azure Batch Processing Reference Architectures
- Azure Real-Time Reference Architectures
- Data Platform Security Design Considerations
- Designing for Resiliency and Scale
- Design for Efficiency and Operations

Schedule

Currently, there are no public classes scheduled. Please contact a Phoenix TS Training Consultant to discuss hosting a private class at 301-258-8200.

Who Should Attend

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.

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

Exam Information

DP-201: Designing an Azure Data Solution

Design Azure data storage solutions	40-45%
Design data processing solutions	25-30%
Design for data security and compliance	25-30%

Note: The content of this exam was updated on July 31, 2020

You can purchase the exam voucher separately through Phoenix TS. Phoenix TS is an authorized testing center for Pearson VUE and Prometric websites. Register for exams by calling us or visiting the Pearson VUE and Prometric websites.

Duration

2 Days

Price

$1,295

Course Outline

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 architecture, regardless of technology choice, can help you design, build, and continuously improve the architecture for an organization's benefit.

- 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, students 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 students will also be exposed to an AI architecture and how the data platform can integrate with an AI solution.

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

After completing this module, students will be able to:

- Understand the core principles of creating architectures
- Describe 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

Module 3: Azure Real-Time Reference Architectures

In this module, the students will learn the reference design and architecture patterns for dealing with streaming data. They will learn how streaming data can be ingested by Event Hubs and Stream Analytics to deliver real-time analysis of data. They will also explore a data science architecture that streams data into Azure Databricks to perform trend analysis. They will finally learn how an Internet of Things (IoT) architecture will require data platform technologies to store data.

- Describe Lambda architectures for a Real-Time Perspective
- Architect a stream processing pipeline with Azure Stream Analytics
- Design a stream processing pipeline with Azure Databricks
- Create an Azure IoT reference architecture

Lab : Azure Real-Time Reference Architectures

- Architect a stream processing pipeline with Azure Stream Analytics
- Design a stream processing pipeline with Azure Databricks
- Create an Azure IoT reference architecture

After completing this module, students will be able to:

- Describe Lambda architectures for a Real-Time Mode Perspective
- Architect a stream processing pipeline with Azure Stream Analytics
- Design a stream processing pipeline with Azure Databricks
- Create an Azure IoT reference architecture

Module 4: Data Platform Security Design Considerations

In this module, the students will learn how to incorporate security into an architecture design and learn the key decision points in Azure provided to help create a secure environment through all the layers of architecture.

- Defense in Depth Security Approach
- Identity Management
- Infrastructure Protection
- Encryption Usage
- Network Level Protection
- Application Security

Lab : Data Platform Security Design Considerations

- Defense in Depth Security Approach
- Identity Protection

After completing this module, students will understand the following:

- Defense in Depth Security Approach
- Identity Management
- Infrastructure Protection
- Encryption Usage
- Network Level Protection
- Application Security

Module 5: Designing for Resiliency and Scale

In this module, students will learn scaling services to handle load. They will learn how identifying network bottlenecks and optimizing storage performance are important to ensure users have the best experience. They will also learn how to handle infrastructure and service failure, recover from the loss of data, and recover from a disaster by designing availability and recoverability into the architecture.

- Adjust Workload Capacity by Scaling
- Optimize Network Performance
- Design for Optimized Storage and Database Performance
- Identify Performance Bottlenecks
- Design a Highly Available Solution
- Incorporate Disaster Recovery into Architectures
- Design Backup and Restore strategies

Lab : Designing for Resiliency and Scale

- Adjust Workload Capacity by Scaling

- Design for Optimized Storage and Database Performance
- Design a Highly Available Solution
- Incorporate Disaster Recovery into Architectures

After completing this module, students will be able to:

- Adjust Workload Capacity by Scaling
- Optimize Network Performance
- Design for Optimized Storage and Database Performance
- Identify Performance Bottlenecks
- Design a Highly Available Solution
- Incorporate Disaster Recovery into Architectures
- Design Backup and Restore strategies

Module 6: Design for Efficiency and Operations

In this module, students will learn how to design an Azure architecture that is operationally-efficient and minimizes costs by reducing spend and they will understand how to design architectures that eliminate waste and gives them full visibility into what is being utilized in the organization's Azure environment.

- 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

- Maximize the Efficiency of your Cloud Environment
- Use Monitoring and Analytics to Gain Operational Insights
- Use Automation to Reduce Effort and Error

After completing this module, students will be able to:

- Maximize the Efficiency of your Cloud Environment
- Use Monitoring and Analytics to Gain Operational Insights
- Use Automation to Reduce Effort and Error

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Starting at **$1,295**

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GSA

Price Match Guarantee

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