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Learning Style: Virtual Classroom

Technology: Microsoft

Difficulty: Intermediate

Course Duration: 3 Days

MS-55247 Designing and Implementing Cloud Data Platform Solutions (MS-55247)

About this course:

This three-day instructor-led course is intended for data professionals who want to design and implement database solutions in SQL Server and on Microsoft Azure. Security, Availability, Disaster Recovery, Scalability, Monitoring and Troubleshooting options will also be demonstrated.

The average salary for Microsoft Data Engineer is **$145,125** per year.

Course Objective:

After completing this course, students will be able to:

- Create SQL Server and Microsoft Azure data solutions
- Create Security solutions for on-premises and cloud databases
- Configure High-Availability, Disaster Recovery and Scalability options for databases
- Monitor, Manage and Automate database solutions

Audience:

- This course is intended for experienced data professionals who design and implement on-premises and Microsoft Azure data solutions.

Prerequisite:

- Experience working with databases
- Experience using SQL

Course Outline:

Module 1: Designing and Implementing Database Solutions for SQL Server and Microsoft Azure

This module explains how to design a database solution for SQL Server and Microsoft Azure databases.

Lessons

- Design and Implement Hybrid SQL Server solutions
- Design and Implement Azure SQL Database solutions
- Design and Implement MySQL and PostgreSQL database solutions in Azure
- Review

Lab : Designing and Implementing Database Solutions for SQL Server and Microsoft Azure

- Implement a Hybrid SQL Server solution
- Implement an Azure SQL Database solution
- Implement a MySQL database solution
- Implement a PostgreSQL database solution

After completing this module, students will be able to:

- Install and configure SQL Server on an Azure VM
- Install and configure Azure databases
- Install and configure MySQL and PostgreSQL databases

Module 2: Manage, Design and Implement Database Security

This module explains how to setup security for an on-premises or Azure database.

Lessons

- Design and Implement SQL Server database security
- Design and Implement Azure SQL Database security
- Review

Lab : Manage, Design and Implement Database Security

- Implement SQL Server database security
- Implement Azure SQL Database security

After completing this module, students will be able to:

- Configure SQL Server database security
- Configure Azure SQL Database security

Module 3: Design for High-Availability, Disaster Recovery and Scalability

This module explains how to configure database solutions for High-Availability, Disaster Recovery and Scalability.

Lessons

- Design and Implement High-Availability Solutions
- Design and Implement Disaster Recovery Solutions
- Design and Implement Scalability Solutions
- Review

Lab : Create Microsoft Azure Data Objects using Python

- Implement a High-Availability Solution
- Implement a Disaster Recovery Solution
- Implement a Scalability Solution

After completing this module, students will be able to:

- Configure a High-Availability solution
- Configure a Disaster Recovery Solution
- Configure a Scalability Solution

Module 4: Monitor and Troubleshoot Database Implementations in Azure

This module explains how to monitor and troubleshoot database implementations.

Lessons

- Monitor and Troubleshoot SQL Server VMs on Azure
- Monitor and Troubleshoot Azure SQL Databases
- Review

Lab : Create Microsoft Azure Data Processes using Python

- Monitor and Troubleshoot SQL Server
- Monitor and Troubleshoot Azure SQL Databases

After completing this module, students will be able to:

- Monitor and Troubleshoot SQL Servers
- Monitor and Troubleshoot Azure SQL Databases

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