DP-201T01 - Designing an Azure Data Solutions

Microsoft - Microsoft Azure - Virtualizzazione e Cloud

Durata:	Lingue:	Certificazione:
2 Giorni	**Italiano**	**Microsoft Certified: Azure Data Engineer Associate**

Descrizione del corso

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. This course is preparatory to the Exam DP-201: Designing an Azure Data Solution valid for Microsoft Certified: Azure Data Engineer Associate

Programma

Module 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

Module 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

Module 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

Module 4: Data Platform Security Design Considerations

- Defense in Depth Security Approach
- Network Level Protection
- Identity Protection
- Encryption Usage
- Advanced Threat Protection

Module 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

Module 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