



MICROSOFT TRAINING

Sql On Azure

Deploy, manage, and optimize SQL databases on Microsoft Azure. Build scalable, high-performance cloud solutions.

DURATION

16 hours

LEVEL

Intermediate

FORMAT

Instructor-Led

- Globally Recognized Certification

- Expert-Led Hands-On Training

- Flexible Scheduling

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COURSE OVERVIEW

This intermediate-level "SQL on Azure" course is meticulously designed for IT professionals seeking to master the deployment, management, and optimization of relational databases within the Microsoft Azure cloud environment. Participants will delve into the core technologies of Azure SQL Database, Azure SQL Managed Instance, and SQL Server on Azure Virtual Machines, gaining practical expertise in choosing the right solution for various workload requirements. The curriculum emphasizes critical skills such as performance tuning, advanced security configurations, disaster recovery planning, and seamless integration with other Azure services, ensuring a holistic understanding of cloud-native database management.

Upon completion, attendees will possess the robust knowledge and hands-on experience required to architect scalable, highly available, and secure data solutions in Azure. This course not only enhances your technical proficiency but also significantly boosts your value in the job market, positioning you as a key asset for organizations transitioning to or optimizing their data infrastructure in the cloud. It's an essential program for anyone looking to build a resilient and cost-effective data platform leveraging Microsoft's powerful cloud capabilities, ultimately driving more efficient and insightful business operations.

Duration	16 hours
Level	Intermediate
Vendor	Microsoft

COURSE CURRICULUM

01 Module 1: Introduction to Azure Data Platform and SQL Offerings

- Overview of Azure's data services ecosystem
- Comparing Azure SQL Database, Azure SQL Managed Instance, and SQL Server on Azure VM
- Understanding service tiers, purchasing models (DTU vs. vCore), and resource governance
- Planning for SQL database deployments in Azure: requirements and considerations
- Fundamentals of Azure networking for SQL services

02 Module 2: Deploying, Configuring, and Migrating to Azure SQL

- Provisioning and configuring Azure SQL Database and Azure SQL Managed Instance
- Connecting to Azure SQL services using various tools
- Database migration strategies: Data Migration Assistant (DMA), Azure Database Migration Service (DMS)
- Managing server and database-level settings
- Implementing elastic pools for multi-tenant environments

03 Module 3: Performance Optimization and Scalability

- Monitoring Azure SQL performance using Azure Monitor, Azure SQL Analytics, and Query Performance Insight
- Advanced query performance tuning techniques for Azure SQL
- Leveraging intelligent performance features: Automatic Tuning, Intelligent Query Processing
- Scaling options: serverless compute, Hyperscale, and read replicas
- Workload management and resource governance in Azure SQL

04 Module 4: Security and Business Continuity

- Implementing authentication and authorization: Azure Active Directory integration, SQL authentication
- Data encryption in transit and at rest (TDE, Always Encrypted, row-level security)
- Advanced threat protection, vulnerability assessment, and auditing

- Backup and restore strategies for Azure SQL Database and Managed Instance
- High availability and disaster recovery: geo-replication, auto-failover groups, zone redundancy

05 Module 5: Advanced Integration and Operational Management

- Integrating Azure SQL with Azure Data Factory for ETL/ELT processes
- Leveraging Azure Functions and Logic Apps with Azure SQL
- Automating administrative tasks with Azure Automation and PowerShell
- Monitoring and alerting best practices for production environments
- Cost management and optimization strategies for Azure SQL resources

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Azure Cloud Database Administrator**
- > **Azure Data Engineer**
- > **Cloud Solutions Architect (Data Focus)**

FREQUENTLY ASKED QUESTIONS

Q: What foundational knowledge should I possess before enrolling in the 'SQL on Azure' course to ensure success?

This intermediate course is best suited for individuals with a solid understanding of T-SQL, relational database concepts, and hands-on experience with SQL Server. While not strictly required, basic familiarity with cloud computing principles and the Azure portal will be highly beneficial, allowing you to quickly grasp the Azure-specific concepts and focus on advanced database management techniques.

Q: How will this course specifically enhance my ability to design and manage highly scalable and available data solutions in the Azure cloud, compared to traditional on-premises SQL Server management?

This course uniquely focuses on Azure-native capabilities for scalability and high availability. You'll gain expertise in leveraging features like elastic pools, Hyperscale, auto-failover groups, and geo-replication, which are specific to the Azure ecosystem. This equips you to design solutions that dynamically scale with demand, achieve higher uptime SLAs, and offer robust disaster recovery capabilities far beyond what's typically feasible with on-premises SQL Server installations, making you proficient in cloud-first data architecture.

Q: Does completion of this 'SQL on Azure' course prepare me for any specific Microsoft Azure certifications, and how does it fit into a broader Azure data career path?

While this course is not a direct exam prep for a single certification, the comprehensive content significantly covers many objectives for the Microsoft Certified: Azure Database Administrator Associate (DP-300) exam. It also provides a strong foundation for other data-focused certifications like the Azure Data Engineer Associate (DP-203), by deepening your understanding of Azure's core data services. This course is a crucial stepping stone for anyone pursuing a career as an Azure Database Administrator, Data Engineer, or Cloud Solutions Architect.

ABOUT COMPUTER PRIDE



East Africa's Premier IT Training Center

With over 15 years of excellence, Computer Pride delivers globally recognized certification programs from leading technology vendors. Located on Kenyatta Avenue in Nairobi's CBD, our state-of-the-art facilities and expert instructors have empowered thousands of professionals across East Africa.

15+

Years of Excellence

10,000+

Professionals Trained

50+

Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

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