

Become a SQL DBA with Azure & AI

This comprehensive training program is designed to transform beginners and working professionals into industry-ready **Database Administration with Azure Cloud, AI expertise**. The course combines Database Administration, Azure SQL Database, High Availability & Disaster Recovery, Performance Tuning, Database Security, Cloud Migration, AI-powered administration, and real-time enterprise projects.

What You'll Learn

- ✅ End-to-End Database Administration Projects
- ✅ Azure SQL Database & Cloud Administration
- ✅ Performance Tuning & Troubleshooting
- ✅ Backup, Restore & Disaster Recovery
- ✅ High Availability (Replication, Log Shipping, Always On)
- ✅ Migrations, Upgrades
- ✅ Realtime Issues, Solutions
- ✅ Cloud Management
- ✅ Job ready Activities and Process Integration, more.. !

Training Highlights

- ✅ 100% Practical Hands-on Sessions
- ✅ Daily Assignments & Practice Exercises
- ✅ Security, Auditing & Compliance
- ✅ Mock Interviews with MNC Interview Questions
- ✅ DP-300 Certification Guidance
- ✅ Lifetime Career Support

Who Should Join?

- Developers
- Infrastructure Engineers
- IT Support Professionals
- Freshers aspiring to become DBAs
- Working professionals looking to transition into Cloud Database Administration

Career Opportunities

After completing this Course & Project Work, you can apply for:

- SQL Database Administrator
- Azure SQL DBA
- Production DBA

SQL DBA Training with Azure, AI Tuning

Plan	Course Modules	Duration	Real-Time Projects	Course Content
Plan A	• Core SQL DBA	6 Weeks	One Real-Time Project	Chapters 1 to 39
Plan B	• Core SQL DBA • Azure SQL DBA • DP-300 Exam Guidance	9 Weeks	Two Real-Time Projects	Chapters 1 to 63

Choose your preferred Training Plan from above.

🔥 Detailed Course Content 🔥

Module 1: Core SQL DBA

Ch 1: SQL Database Job Roles

- ✓ **Introduction to Databases**
- ✓ **DBA Job Roles, Activities**
- ✓ **3rd Party Tools, Incident Management**
- ✓ **DBA Job Scope, Growth**

Ch 2: Database Intro & Installations

- ✓ **SQL Server Installations**
- ✓ **Instance & Collations**
- ✓ **SSMS Tool & Connections**
- ✓ **Authentications. Installation Issues**

Ch 3: SQL Basics V1 (Commands)

- ✓ **SQL Basics (DDL, DML, etc..)**
- ✓ **Creating Databases, Tables**
- ✓ **Data Inserts (GUI, SQL)**
- ✓ **Basic SELECT Queries**

Ch 4: SQL Basics V2 (Commands, Operators)

- ✓ DDL: Create, Alter, Drop
- ✓ DML: Insert, Update, Delete
- ✓ DQL: Select, Fetch. SQL Operators

Ch 5: Schemas & Data Imports

- ✓ Schemas, Table Grouping
- ✓ Data Imports with Excel
- ✓ Data Types Detection
- ✓ OLE-DB, GO, 4 Part Naming

Ch 6: Constraints, Keys & RDBMS

- ✓ Null, Not Null Constraints
- ✓ Unique Key & Check
- ✓ Primary Key & Default
- ✓ Foreign Keys, DB Diagrams

Ch 7: Joins & Queries

- ✓ Joins & TSQL Queries
- ✓ Inner Joins, Matching Data
- ✓ Outer Joins: Left, Right, Full
- ✓ Self Joins, Conditions

Ch 8: Views & RLS

- ✓ Views: Realtime Usage
- ✓ DML, SELECT with Views
- ✓ WITH CHECK OPTION
- ✓ RLS, Important System Views

Ch 9: Stored Procedures - 1

- ✓ Stored Procedures & Parameters
- ✓ SELECT & Conditional DML
- ✓ IF Statement, SP Recompilation
- ✓ System Stored Procedures

Ch 10: Functions & Queries

- ✓ Scalar, Table Value Functions
- ✓ Variables & Parameters
- ✓ Date Time, Conversion Functions
- ✓ String, Aggregated Functions

Ch 11: Triggers & Automations

- ✓ DDL & DML Triggers
- ✓ For / After, Instead of Triggers
- ✓ Disabling DMLs Triggers

Ch 12: Transactions & ACID

- ✓ Auto Commit & Explicit

- ✓ **Commit, Rollback, Lock Hints**
- ✓ **Checkpoint, Query Blocking**
- ✓ **TRY...CATCH, Error Handling**

Ch 13: SQL Server Architecture

- ✓ **Database Engine Components**
- ✓ **Parser, Compiler & Optimizer**
- ✓ **Checkpoint, SQL OS**
- ✓ **Memory Manager & IO Managers**

Ch 14: Database Architecture (VLDB)

- ✓ **Planning Large Databases**
- ✓ **Files, Filegroups**
- ✓ **Pages, Extents.**
- ✓ **VLF, LSN, Mini LSN**

Ch 15: Backups & Audits

- ✓ **Database Backups & Types**
- ✓ **DB, Filegroup, File Backups**
- ✓ **Copy Only, Partial Backups**
- ✓ **Checksum, Backup Audits**

Ch 16: Restores & Recovery, PITR

- ✓ **DB, Filegroups, File Restores**
- ✓ **Restoring & Online States**
- ✓ **Standby Mode & MOVE**
- ✓ **Point-In-Time (PITR) Restores**

Ch 17: Jobs, Maintenance Plans

- ✓ **SQL Server Agent, Jobs**
- ✓ **Steps & Schedules**
- ✓ **Maintenance Plans, Backups**
- ✓ **Common Errors, Solutions**

Ch 18: Database Mail, Alerts

- ✓ **Database Mail, SMTP**
- ✓ **Alert System: Agent Settings**
- ✓ **Operators, Job Notifications**
- ✓ **Alert Configurations**

Ch 19: Security Management - 1

- ✓ **Security Objects, Logins**
- ✓ **Users, Roles & Principals**
- ✓ **Object, Column Level Security**
- ✓ **Security Audit, Logon Failures**

Ch 20: Security Management - 2

- ✓ Keys & Certificates
- ✓ Encryptions & Data Security
- ✓ Password Encryptions

Ch 21: Database Migrations

- ✓ Credentials, SSIS Proxies
- ✓ CDW Packages. SMO Method
- ✓ Database Detach – Attach
- ✓ Detect, Fix Orphan Users

Ch 22: Tuning: Audits, DMV, AM Tool

- ✓ Activity Monitor. Perfmon Tool
- ✓ Query Store. Recovery Models
- ✓ DMVs, DMFs. Long Running Queries

Ch 23: Tuning: Indexes

- ✓ Clustered, Non Clustered, Online
- ✓ Column Store, Included, Covering
- ✓ Indexed Views, Selectivity
- ✓ Execution Plans, Index Seek

Ch 24: Tuning: Partitions, Statistics

- ✓ Partitions: Performance Tuning
- ✓ Functions & Schemes, Compressions
- ✓ Index & Column Statistics
- ✓ Stats Updates in Real-Time

Ch 25: Index Management

- ✓ Index Rebuilds, Re-Organize
- ✓ Database Maintenance Plans
- ✓ Resumable & Online Indexes
- ✓ PAUSE, RESUME in Rebuilds

Ch 26: Tuning Tools

- ✓ Tuning Tools: DTA, Profiler
- ✓ PDS Recommendations
- ✓ Query Execution Cache
- ✓ Tuning Tools, Precautions

Ch 27: Execution Plans & AI Tuning

- ✓ Execution Plan Analysis
- ✓ IO, CPU Cost, SubTree, Operators
- ✓ NUMA Nodes, Processor Affinity
- ✓ Thread Count, DOP, CTEs
- ✓ AI Enabled Tuning For SQL DBAs

Ch 28: Locks & Isolation Levels

- ✓ S, X, IX, U and MD Locks
- ✓ Sch-M and Sch-S Locks
- ✓ SP_WHO2, SP_LOCK
- ✓ Isolation Levels, Versioning
- ✓ Read Committed Snapshot

Ch 29: Deadlocks, LIVE Locks

- ✓ Deadlocks in Real-world
- ✓ Profiler Tool & Deadlocks
- ✓ Deadlock Graphs & Prevention
- ✓ sysprocesses & sp_who2

Ch 30: HA DR @ Replication - 1

- ✓ Replication: Realtime Usage
- ✓ Distributor Configurations
- ✓ Publisher and Subscriber
- ✓ Snapshot, Transactional
- ✓ Replication Monitor, Alerts

Ch 31: HA DR @ Replication - 2

- ✓ Merge Replication & Usage
- ✓ Peer – Peer Replication
- ✓ Conflict Detection, Avoidance
- ✓ Limitations with Replication
- ✓ Common Errors, Solutions

Ch 32: HA DR @ Log Shipping

- ✓ Log Shipping Configurations
- ✓ Primary, Secondary Servers
- ✓ TUF Files, NORECOVERY, STANDBY
- ✓ Common Errors, Solutions

Ch 33: HA DR @ DB Mirroring

- ✓ Database Mirroring Concepts
- ✓ Principal, Mirror, Witness
- ✓ Synchronous, Asynchronous
- ✓ Automated Failover Process

Ch 34: DB Health, Repairs, Issues

- ✓ DBCC for Audits, Repairs
- ✓ MSDB Suspect Pages, DB Repairs
- ✓ Single User Mode. Emergency Mode
- ✓ Log Space Issues, TempDB Issues
- ✓ Memory Issues, DB Health Strategies

Ch 35: Updates & Upgrades

- ✓ Updates Process. RTM, SP, CU
- ✓ Upgrades Process (In-Place)
- ✓ Cautions & Maintenance. Rollbacks
- ✓ Command Line Installations, DAC
- ✓ System DB Rebuilds, SQL CMD

Ch 36: SLA, OLA & Ticketing Tools

- ✓ Incident Management. KB Articles
- ✓ SLA & OLA. Ticketing Tools
- ✓ Service Requests & Escalation Process

Ch 37: 3rd Party Tools, AI For SQL DBA

- ✓ Redgate Monitor, Blocking
- ✓ SQL Sentry, AI Enabled Administration
- ✓ sp_whoisactive
- ✓ Execution Plan Analysis

Ch 38: SQL DBA Project – Phase 1

Environment: Ecommerce Database

- ✓ Routine DBA Activities
- ✓ Maintenance DBA Activities
- ✓ Auditing Techniques
- ✓ RCA (Root Cause Analysis)

Ch 39: SQL DBA Project – Phase 2

Environment: Ecommerce Database

- ✓ Emergency DBA Activities
- ✓ Slow Database Issues
- ✓ Network Errors, Security Strategies
- ✓ HA DR Strategies, Common Error Codes

Module 2: Azure SQL DBA

Ch 40: Cloud Basics, Azure Funda

- ✓ Cloud Fundamentals
- ✓ IaaS, PaaS, SaaS Cloud Types
- ✓ Azure Resources & Services
- ✓ Azure Account & Subscription

Ch 41: Azure SQL Deployments

- ✓ Azure SQL Server Deployments
- ✓ Azure SQL Databases, Firewall
- ✓ SSMS Tool: Test Connections
- ✓ Azure SQL DB Operations

Ch 42: vCore, DTU, Elastic Pools

- ✓ Azure SQL DB Licensing
- ✓ DTUs: Basic, Standard Types
- ✓ VPU and Cost Optimization
- ✓ Elastic Pools, eDTU
- ✓ Elastic Query Processing

Ch 43: Azure Storage Account

- ✓ Azure Data Lake Storage Account
- ✓ General Purpose, Big Data Options
- ✓ Storage Containers, BLOB File Uploads

Ch 44: Azure SQL DB Migrations

- ✓ SQL DB Migration Options
- ✓ ADLS & Bacpac
- ✓ Azure SQL DB Import
- ✓ Migration Issues

Ch 45: Azure Automated Tuning, AI

- ✓ Server, DB Level Tuning
- ✓ Built-In Intelligence, AI
- ✓ Azure AI Search Service
- ✓ AI Indexes, Tokens, Refresh

Ch 46: Query Store, Insights, Alerts

- ✓ Azure SQL DB Metrics
- ✓ CPU, Memory, Log Metrics
- ✓ Data File Metrics, Alerts
- ✓ Action Groups & Emails

Ch 47: Azure Backups, Restores

- ✓ Azure SQL DB Backups
- ✓ LTR Backups, Log Backups
- ✓ Backup History, Restores
- ✓ LTR & PITR Restores

Ch 48: HA DR @ Replication

- ✓ Geo Replication
- ✓ Manual & Automated Failover
- ✓ DMVs For Replication
- ✓ Replication Tests

Ch 49: HA DR @ Server Failover

- ✓ Multi Database Replication
- ✓ Failover Groups
- ✓ Replica DB: Status
- ✓ Automated Failover

Ch 50: Azure Security: Logins, RLS

- ✓ Azure SQL Server Security
- ✓ Logins, Users, Roles
- ✓ Row Level Security (RLS)
- ✓ Dynamic Data Masking (DDM)

Ch 51: Azure Security: RBA, TDE

- ✓ Azure AD Users, AD Principals
- ✓ IAM Concepts, Implementing RBAC
- ✓ MFA Authentication

Ch 52: Azure Managed Instance

- ✓ Azure MI Implementation
- ✓ Cloud Azure MI Access
- ✓ Azure MI Migrations
- ✓ On-Premises Versus Azure

Ch 53: Azure Elastic Jobs

- ✓ Elastic Job Agent & Architecture
- ✓ Job Credentials, Managed Identity & Target Groups
- ✓ Scheduling Elastic Jobs
- ✓ Job Execution, Monitoring & Troubleshooting

Ch 54: PowerShell, Azure CLI

- ✓ Azure PowerShell
- ✓ Az and get Commands
- ✓ Resources, Password Resets
- ✓ Firewall Config, Cleanups & Azure CLI

Ch 55: Azure Virtual Machines

- ✓ Azure IaaS, Capacity & Size
- ✓ Lock Pages, Disk Capacity
- ✓ Instant File Initialization
- ✓ RDP, Bastion. DB Operations

Ch 56: Always-On: Concepts

- ✓ HA DR in Azure IaaS
- ✓ Always-On Concept, Requirements
- ✓ SQL VMs, DC VM, ADDS
- ✓ AOAG Requirements, Listener

Ch 57: Always-On: Virtual Network, DC

- ✓ AOAG Resource Groups
- ✓ Virtual Network, Subnet & Ranges
- ✓ Windows Server VM & DCVM Networking

Ch 58: Always-On: DCVM, FSW

- ✓ Active Directory Domain Services
- ✓ DNS, Forest, Domain Name
- ✓ AD Users, Domain Admin
- ✓ ADLS & Witness, Quorum

Ch 59: Always-On: SQL Clusters, HA-DR

- ✓ Availability Groups, AG Listener
- ✓ SQL Server Clusters, Cluster Services
- ✓ DC Linking. Master & Slave Nodes
- ✓ WSFC Concepts, AOAG Config

Ch 60: Always-On: Database Configurations

- ✓ Always-On Config Verifications
- ✓ System Views & Metadata
- ✓ Adding AOAG Databases
- ✓ Listener & Peer Verifications

Ch 61: Always-On: Monitoring, Issues

- ✓ Availability Groups, Listener
- ✓ SQL Server Clusters
- ✓ Always-On Testing & Monitoring
- ✓ Common Issues & Solutions

Ch 62: SQL DBA Project 2 – Phase 1

Environment: Ecommerce Database

- ✓ Routine DBA Activities
- ✓ Emergency DBA Activities
- ✓ Maintenance DBA Activities
- ✓ Auditing Techniques, RCA

Ch 63: SQL DBA Project 2 – Phase 2

Environment: Ecommerce Database

- ✓ Login Failure Errors
- ✓ Slow Database Issues
- ✓ Network Errors, Security Strategies
- ✓ HA DR Strategies, Common Error Codes

Module 3: SQL DBA Exam

- ✓ DP-300 Exam Guidance
- ✓ Exam Prep. Guide
- ✓ Exam Dumps & Exam Mocks

Module 4: Career Guidance

- ✓ Resume Optimization
- ✓ Mock Interviews
- ✓ Job Assistance

In this entire DBA course:
Students will learn, **build confidence** on backup/recovery plan + PITR evidence + performance-tuning report + HA/DR configuration + monitoring dashboard + troubleshooting tickets + RCA documents + final project solution.



Ready to Become an Expert?
Join Our Next Batch. Reach us today!
Call/WhatsApp: +91 9951440801
Course Details: https://sqlschool.com/sql-dba-training/