



MS SQL Server DBA Training Course

In Collaboration with **Microsoft**

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About the Program

Intellipaate's MS SQL Server DBA training and certification course is curated in sync with the Microsoft 70-462 exam (Administering Microsoft SQL Server Databases). This course lets you gain full proficiency in the SQL Database as an administrator. We provide the best online training classes to help you learn database administration (using SQL Server), database design, implementation, support, and maintenance. Moreover, you will work on real-world industry projects in this program. As part of this online classroom training, you will also receive the official course material issued by Microsoft for Querying Data with Transact-SQL and Administering Microsoft® SQL Server® Databases.



Collaborating with Microsoft

Microsoft is one of the largest organizations in terms of inventing creative tools for various purposes. Experts from Microsoft and other top MNCs will offer you their understanding and knowledge in the field through this online certification. Moreover, you will also get deep insights into the concepts and gain hands-on experience by working on industry-specified assignments.

Benefits for students from Microsoft:

- Industry-recognized Microsoft certification
- Real-time projects and exercises

About IntelliPaat

IntelliPaat is one of the leading e-learning training providers with more than 600,000 learners across 55+ countries. We are on a mission to democratize education as we believe that everyone has the right to quality education.

Our courses are delivered by subject matter experts from top MNCs, and our world-class pedagogy enables learners to quickly learn difficult topics in no time. Our 24/7 technical support and career services will help them jump-start their careers in their dream companies.

Key Features



**16 HRS INSTRUCTOR-LED
TRAINING**



16 HRS SELF-PACED TRAINING



**32 HRS REAL-TIME
PROJECT WORK**



LIFETIME ACCESS



24/7 TECHNICAL SUPPORT



**INDUSTRY-RECOGNIZED
CERTIFICATION**



**JOB ASSISTANCE THROUGH
80+ CORPORATE TIE-UPS**



FLEXIBLE SCHEDULING

Career Support



SESSIONS WITH INDUSTRY MENTORS

Attend sessions from top industry experts and get guidance on how to boost your career growth



MOCK INTERVIEWS

Mock interviews to make you prepare for cracking interviews by top employers



GUARANTEED INTERVIEWS & JOB SUPPORT

Get interviewed by our 400+ hiring partners



RESUME PREPARATION

Get assistance in creating a world-class resume from our career services team



Why take up this course?

- Most companies estimate that they're analyzing a mere 12% of the data they have – Forrester Research
- Worldwide Business Intelligence and Analytics market to grow to US\$22.8 billion in the next 2 years – Gartner
- A SQL Database Administrator in the United States can earn US\$91,000 – Indeed

SQL Developers are in great demand among companies that work on large databases. Along with this, SQL Administrators are also needed to manage, monitor, and secure database servers. This training course will provide you with the complete set of skills to help you land high-paying jobs in some of the best companies around the world.

Who should take up this course?

- Database Administrators and Developers
- Project Managers, Analysts, and Testers
- Big Data and Hadoop Professionals

Program Curriculum

SQL Server DBA Course Content

- **INSTALLATION & CONFIGURATION**

- **Plan Installation**

Evaluate installation requirements; design the installation of SQL Server and its components (drives, service accounts, etc.); plan scale-up vs scale-out basics; plan for capacity, including if/when to shrink, grow, autogrow, and monitor growth; manage the technologies that influence SQL architecture (e.g., service broker, full text, scale out, etc.); design the storage for new databases (drives, filegroups, partitioning, etc.); design the database infrastructure; configure an SQL Server standby database for reporting purposes; Windows-level security and service-level security; core mode installation; benchmark a server before using it in a production environment (SQLIO, Tests on SQL Instance, etc.), and choose the right hardware

- **Installing SQL Server and Related Services**

Test connectivity; enable and disable features; install SQL Server database engine and SSIS (but not SSRS and SSAS); and configure an OS disk

- **Implementing a Migration Strategy**

Restore vs detach/attach; migrate security; migrate from a previous version; migrate to new hardware, and migrate systems and data from other sources

- **Configuring Additional SQL Server Components**

Set up and configure all SQL Server components (Engine, AS, RS, and SharePoint integration) in a complex and highly secure environment; configure full-text indexing; SSIS security; and filestream and filetable

- **Manage SQL Server Agent**

Create, maintain, and monitor jobs; administer jobs and alerts; automate (setup, maintenance, and monitoring) across multiple databases and multiple instances, and send to 'Manage SQL Server Agent Jobs'

- **MANAGING INSTANCES & DATABASES**

- **Managing and Configuring Databases**

Design multiple file groups; database configuration and standardization: autoclose, autoshrink, recovery models; manage file space, including adding new filegroups and moving objects from one filegroup to another; implement and configure contained databases; data compression; configure TDE; partitioning; manage log file growth, and DBCC

- **Configuring SQL Server Instances**

Configure and standardize a database: autoclose, autoshrink, and recovery models; install default and named instances; configure SQL to use only certain CPUs (affinity masks, etc.); configure server-level settings; configure many databases/instance, many instances/server, virtualization; configure clustered instances, including MSDTC; memory allocation; database mail, and configure SQL Server engine: memory, fillfactor, sp_configure, and default options

- **Implementing an SQL Server Clustered Instance**

Install a cluster; manage multiple instances on a cluster; set up subnet clustering, and recover from a failed cluster node

- **Managing SQL Server Instances**

Install an instance; manage interaction of instances; SQL patch management; install additional instances; manage resource utilization by using Resource Governor, and cycle error logs

- **OPTIMIZING & TROUBLESHOOTING**

- **Identifying and Resolving Concurrency Problems**

Examine deadlocking issues using the SQL server logs using trace flags; design reporting database infrastructure (replicated databases); monitor via DMV or other MS product; diagnose blocking, live locking and deadlocking; diagnose waits; performance detection with built in DMVs; know what affects performance, and locate and if necessary kill processes that are blocking or claiming all resources

- **Collecting, Analyzing, and Troubleshooting Data**

Monitor using Profiler; collect performance data by using System Monitor; collect trace data by using SQL Server Profiler; identify transactional replication problems; identify and troubleshoot data access problems; gather performance metrics; identify potential problems before they cause service interruptions; identify performance problems; use XEvents and DMVs; create alerts on critical server condition; monitor data and server access by creating audit and other controls; identify IO vs memory vs CPU bottlenecks, and use the Data Collector tool

- **Auditing SQL Server Instances**

Implement a security strategy for auditing and controlling the instance; configure an audit; configure server audits; track who modified an object; monitor elevated privileges as well as unsolicited attempts to connect, and policy-based management

- **MANAGING DATA**

- **Configuring and Maintaining a Back-up Strategy**

Manage different backup models, including point-in-time recovery; protect customer data even if backup media is lost; perform backup/restore based on proper strategies including backup redundancy; recover from a corrupted drive; manage a multi-TB database; implement and test a database implementation and a backup strategy (multiple files for user database and tempdb, spreading database files, backup/restore); back up a SQL Server environment, and back up system databases

- **Restoring Databases**

Restore a database secured with TDE; recover data from a damaged DB (several errors in DBCC checkdb); restore to a point in time; file group restore, and page-level restore

- **Implementing and Maintaining Indexes**

Inspect physical characteristics of indexes and perform index maintenance; identify fragmented indexes; identify unused indexes; implement indexes; defrag/rebuild indexes; set up a maintenance strategy for indexes and statistics; optimize indexes (full, filter index); statistics (full, filter) force or fix queue; when to rebuild vs. reorg and index; full text indexes, and column store indexes

- **Importing and Exporting Data**

Transfer data; bulk copy, and bulk insert

- **IMPLEMENTING SECURITY**

- **Managing Logins and Server Roles**

Configure server security; secure the SQL Server using Windows Account / SQL Server accounts, server roles; create log in accounts; manage access to the server, SQL Server instance, and databases; create and maintain user-defined server roles, and manage certificate logins

- **Managing Database Security**

Configure database security; database level, permissions; protect objects from being modified; auditing, and encryption

- **Managing Users and Database Roles**

Create access to server/database with least privilege; manage security roles for users and administrators; create database user accounts, and contained login

- **Troubleshooting Security**

Manage certificates, keys, and endpoints

- **IMPLEMENTING HIGH AVAILABILITY**

- **Implementing AlwaysOn**

Implement AlwaysOn availability groups and AlwaysOn failover clustering

- **Implementing replication**

Troubleshoot replication problems and identify appropriate replication strategy

Project Work

MS SQL Server DBA Projects

Project: SQL Server Audit

Industry: General

Problem Statement: How to track and log events happening on the database engine

Topics: This project is involved with implementing an SQL Server audit that includes creating of the TestDB database, triggering audit events from tables, altering audit, checking, filtering, etc. You will learn to audit an SQL Server instance by tracking and logging the events on the system. You will work with SQL Server Management and learn about database-level and server-level auditing.

Highlights:

- SQL Server Management Studio
- Expanding SQL Server log folder
- Database and server audit specifications

Project 2: Managing SQL Server for a High-tech Company

Industry: Information Technology

Problem Statement: An IT company wants to manage its MS SQL Server database and gain valuable insights from it.

Topics: In this project, you will be administrating the MS SQL Server database. You will learn about the complete architecture of MS SQL Server. You will also be familiarized with the enterprise edition of SQL Server, various tools of SQL Server, creating and modifying databases in real-time, etc.

Highlights:

- Creating database schema in SQL Server
- Adding, removing, and moving database files
- Database backup and recovery

Certification

After the completion of the course, you will get certificates from Intellipaate and Microsoft.



Success Stories



Kevin K Wada

Thank you very much for your top-class service. A special mention should be made for your patience in listening to my queries and giving me a solution, which was exactly what I was looking for. I am giving you a 10 on 10!



Sampson Basoah

The Intellipaate team helped me in selecting the perfect course that suits my profile. The whole course was practically oriented, and the trainers were always ready to answer any question. I found this course to be impactful. Thank you.



Quentin Jones

Worth the money! The given training resources were well-organized. Overall, I got benefited from taking up the course. Besides, I also got a job through the placement assistance provided by Intellipaate. Thanks, Intellipaate. I'm so grateful to you.



Shailja Sehgal

I had the best learning experience at Intellipaate in its SQL training. The projects, assignments, and course content were awesome. I would like to enroll in other courses that are offered by Intellipaate.



Sachin Bhatia

The best training program for MS SQL! My decision to learn from Intellipaate was the best to upgrade my career. This course gave a thorough understanding of the subject. I recently completed the course and experienced good quality teaching offered by Intellipaate.

CONTACT US

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