



# Certified MS-SQL Server Administrator

**Vskills Certifications**

Vskills Brochure



Skills for a secure future

## Certified MS-SQL Server Administrator

Microsoft SQL Server Administration, often referred to as MS SQL Server Administration, is the process of managing and maintaining Microsoft SQL Server databases and the systems that use them. SQL Server is a widely used relational database management system (RDBMS) developed by Microsoft, and SQL Server administrators are responsible for ensuring the availability, security, performance, and integrity of SQL Server databases in an organization.

SQL Server administrators play a critical role in ensuring that SQL Server databases meet the organization's data management needs while maintaining data integrity, security, and performance. They work closely with database developers, system administrators, and other IT professionals to support the organization's data-related goals.

### Why should one take this certification?

This Course is intended for professionals and graduates wanting to excel in their chosen areas. It is also well suited for those who are already working and would like to take certification for further career progression.

Earning Vskills SQL Server Administration Certification can help candidate differentiate in today's competitive job market, broaden their employment opportunities by displaying their advanced skills, and result in higher earning potential.

### Who will benefit from taking this certification?

Job seekers looking to find employment in web development, or IT departments of various companies, students generally wanting to improve their skill set and make their CV stronger and existing employees looking for a better role can prove their employers the value of their skills through this certification.

### Test Details

- **Duration:** 60 minutes
- **No. of questions:** 50
- **Maximum marks:** 50, Passing marks: 25 (50%)

There is no negative marking in this module.

### Fee Structure

Rs. 3,499/- (Excludes taxes)\*

\*Fees may change without prior notice, please refer <http://www.vskills.in> for updated fees

### Companies that hire Vskills Certified SQL Server Administrators

SQL Server Administration professionals are in great demand, especially it companies are looking for skilled SQL Server Administration Professionals. Here is the list of some of the companies hiring SQL Server Administration Professionals, IBM, Barclays, Accenture, JP Morgan, Siemens, Capgemini, Flipkart, Amazon, Toptal, Mindtree, Genpact, HSBC etc.

# Table of Contents

## **1. Database Fundamentals**

- 1.1 Introduction to Relational Databases
- 1.2 Understanding SQL Server Editions and Versions
- 1.3 Database Objects (Tables, Views, Indexes, etc.)

## **2. SQL Server Installation and Configuration**

- 2.1 System Requirements
- 2.2 Installation Options (Standalone, Clustered, etc.)
- 2.3 Post-installation Configuration

## **3. Database Creation and Design**

- 3.1 Creating Databases
- 3.2 Schema Design
- 3.3 Data Types and Constraints

## **4. Data Modification and Querying**

- 4.1 SQL Query Language (SELECT, INSERT, UPDATE, DELETE)
- 4.2 Data Manipulation Language (DML)
- 4.3 Query Optimization and Performance Tuning

## **5. Security and Authorization**

- 5.1 Authentication Modes (Windows Authentication, SQL Server Authentication)
- 5.2 User and Role Management
- 5.3 Permissions and Access Control

## **6. Backup and Restore**

- 6.1 Database Backup Strategies
- 6.2 Database Restore Processes
- 6.3 Backup and Restore Options

## **7. High Availability and Disaster Recovery**

- 7.1 SQL Server Always On Availability Groups
- 7.2 Database Mirroring
- 7.3 Log Shipping
- 7.4 Failover Clustering

## **8. Performance Optimization**

- 8.1 Query Execution Plans
- 8.2 Indexing Strategies
- 8.3 Monitoring and Tuning
- 8.4 Performance Counters and DMVs

## **9. Automation and Scripting**

- 9.1 SQL Server Agent Jobs
- 9.2 T-SQL Scripting
- 9.3 PowerShell for SQL Server Administration

## **10. Maintenance and Monitoring**

- 10.1 Database Maintenance Plans
- 10.2 SQL Server Profiler
- 10.3 SQL Server Management Studio (SSMS)
- 10.4 SQL Server Data Tools (SSDT)

## **11. Replication and Data Distribution**

- 11.1 Transactional Replication
- 11.2 Snapshot Replication
- 11.3 Peer-to-Peer Replication
- 11.4 Data Distribution

## **12. SQL Server Integration Services (SSIS)**

- 12.1 ETL (Extract, Transform, Load) Processes
- 12.2 Package Creation and Deployment
- 12.3 SSIS Catalogs

## **13. SQL Server Reporting Services (SSRS)**

- 13.1 Report Design and Development
- 13.2 Report Deployment and Configuration
- 13.3 Report Subscription and Security

## **14. SQL Server Analysis Services (SSAS)**

- 14.1 Multidimensional and Tabular Models
- 14.2 Cube Design and Processing
- 14.3 MDX and DAX Queries

## **15. SQL Server Maintenance and Troubleshooting**

- 15.1 Database Corruption and Recovery
- 15.2 Error Handling and Event Logs
- 15.3 Troubleshooting Common Issues

## **16. SQL Server Upgrades and Patching**

- 16.1 Planning and Performing Upgrades
- 16.2 Applying Service Packs and Cumulative Updates

**17. SQL Server Security Best Practices**

- 17.1 Security Auditing
- 17.2 Encryption and Data Masking
- 17.3 Compliance and Regulatory Requirements

**18. SQL Server Cloud Offerings (e.g., Azure SQL Database)**

- 18.1 Azure SQL Deployment Options
- 18.2 Management and Monitoring in the Cloud

**19. Disaster Recovery Planning**

- 19.1 Backup and Restore Strategies
- 19.2 Business Continuity and High Availability Planning

## Certifications

- ▶ **Accounting, Banking & Finance**
  - Certified GST Professional
  - Certified AML-KYC Compliance Officer
  - Certified Business Accountant
  - Certified BASEL III Professional
  - Certified GAAP Accounting Standards Professional
  - Certified Treasury Markets Professional
- ▶ **Big Data**
  - Certified Hadoop and Mapreduce Professional
- ▶ **Cloud Computing**
  - Certified Cloud Computing Professional
- ▶ **Design**
  - Certified Interior Designer
- ▶ **Digital Media**
  - Certified Social Media Marketing Professional
  - Certified Inbound Marketing Professional
  - Certified Digital Marketing Professional
- ▶ **Foreign Trade**
  - Certified Export Import (Foreign Trade) Professional
- ▶ **Health, Nutrition and Well Being**
  - Certified Fitness Instructor
- ▶ **Hospitality**
  - Certified Restaurant Team Member (Hospitality)
- ▶ **Human Resources**
  - Certified HR Compensation Manager
  - Certified HR Staffing Manager
  - Certified Human Resources Manager
  - Certified Performance Appraisal Manager
- ▶ **Office Skills**
  - Certified Data Entry Operator
  - Certified Office Administrator
- ▶ **Project Management**
  - Certified Master in Project Management
  - Certified Scrum Specialist
- ▶ **Real Estate**
  - Certified Real Estate Consultant
- ▶ **Marketing**
  - Certified Marketing Manager
- ▶ **Quality**
  - Certified Six Sigma Green Belt Professional
  - Certified Six Sigma Black Belt Professional
  - Certified TQM Professional
- ▶ **Logistics & Supply Chain Management**
  - Certified International Logistics Professional
  - Certified Logistics & SCM Professional
  - Certified Supply Chain Management Professional
- ▶ **Legal**
  - Certified IPR & Legal Manager
  - Certified Labour Law Analyst
  - Certified Business Law Analyst
  - Certified Corporate Law Analyst
- ▶ **Information Technology**
  - Certified Angular JS Professional
  - Certified Basic Network Support Professional
  - Certified Business Intelligence Professional
  - Certified Core Java Developer
  - Certified E-commerce Professional
  - Certified IT Support Professional
  - Certified PHP Professional
  - Certified Selenium Professional
- ▶ **Mobile Application Development**
  - Certified Android Apps Developer
  - Certified iPhone Apps Developer
- ▶ **Security**
  - Certified Ethical Hacking and Security Professional
  - Certified Network Security Professional
- ▶ **Management**
  - Certified Corporate Governance Professional
  - Certified Corporate Social Responsibility Professional
  - Certified Leadership Skills Professional
- ▶ **Life Skills**
  - Certified Business Communication Specialist
  - Certified Public Relations Officer
- ▶ **Media**
  - Certified Advertising Manager
  - Certified Advertising Sales Professional
- ▶ **Sales, BPO**
  - Certified Sales Manager
  - Certified Telesales Executive

**& many more job related certifications**

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