

Administering a SQL Database Infrastructure Training

Course Duration: 40 Hours

Course Code: 20764-C

1. Course Overview

Administering a SQL Database Infrastructure Training is designed to equip professionals with the skills required to manage, maintain, and secure SQL Server databases. This course covers installation, configuration, performance tuning, backup, recovery, and high availability solutions to ensure efficient database operations in real-world environments.

2. What You'll Learn

- Install and configure SQL Server infrastructure
- Manage databases, storage, and files
- Implement backup and restore strategies
- Monitor and optimize database performance
- Configure security, users, and permissions
- Implement high availability and disaster recovery solutions
- Automate administrative tasks using SQL tools

3. Target Audience

- Database Administrators (DBAs)
- IT Professionals managing databases
- System Administrators
- Data Analysts and Developers
- Freshers looking to build a career in database administration

4. Pre-Requisites

- Basic knowledge of databases and SQL concepts
- Familiarity with Windows Server environment
- Understanding of basic IT infrastructure
- Prior experience with SQL Server (optional but beneficial)

5. Course Content

Module 1: Introduction to SQL Server

- Overview of SQL Server architecture
- Editions and components

Module 2: Installing and Configuring SQL Server

- Installation process
- Configuration settings

Module 3: Database Management

- Creating and managing databases
- File groups and storage management

Module 4: Security Management

- Authentication and authorization
- Roles and permissions

Module 5: Backup and Restore

- Backup types and strategies
- Restore operations

Module 6: Monitoring and Performance Tuning

- Performance monitoring tools
- Query optimization techniques

Module 7: High Availability and Disaster Recovery

- Always On Availability Groups
- Failover clustering and replication

Module 8: Automation and Maintenance

- SQL Server Agent
- Maintenance plans

