XCELERATE TRAINING INSTITUTE

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INFORMATION TECHNOLOGY

Administering MS SQL Server

DURATION	LANGUAGE	FORMAT
10 days	**English**	**Classroom / Online**

Upcoming dates

Dates	Venue	Format	Fee
22 ?????? – 5 ???? 2027	Live online	Online (live)	**€1?800**
2 – 13 ????? 2027	Live online	Online (live)	**€1?800**
6 – 17 ?????? 2027	Boston	Classroom	**€7?200**

Register or ask a question

Online: x8ti.com/course/administering-ms-sql-server/

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Administering MS SQL Server

Introduction

This course by Xcelerate Training Institutes instructor-led Microsoft SQL Server course equips participants with the essential knowledge and skills for managing SQL Server databases in live production environments. The course delves into SQL Server features and tools for database maintenance and prepares students for the Exam 70-462. Participants can customize module selection. The hands-on training, combining graphical interfaces and SQL scripts, emphasizes real-world scenarios, troubleshooting, optimization, configuration, and best practices. Each module concludes with exercises, assignments, and quizzes. The course covers SQL Server versions 2016 to 2008.

Learning Objectives

Upon completion, participants will be able to:

- Plan and install SQL Server
- Understand SQL Server databases, their structure, and configuration
- Implement backup and recovery strategies

Training Methodology

A comprehensive training program for MS SQL Server administration should focus on practical hands-on experience. This involves setting up and configuring SQL Server instances, creating databases and users, managing security, performance tuning, and troubleshooting common issues. Real-world scenarios and case studies can provide valuable context for learners. Regular assessments and feedback are essential to monitor progress and identify areas for improvement. Additionally, access to ongoing support and resources can help learners stay updated with the latest best practices and technologies.

Benefits for Your Organisation

Improved Data Integrity and Reliability:

- Data consistency: Ensuring data accuracy and consistency across different systems.
- Error prevention: Proactive measures to prevent data loss and corruption.
- Data recovery: Efficient recovery plans for data restoration in case of failures.

Enhanced Performance and Scalability:

- Optimized queries: Identifying and addressing performance bottlenecks to improve query execution speed.
- Resource management: Effective allocation and utilization of server resources to maximize performance.
- Scalability planning: Strategies for accommodating future growth and increased data loads.

Enhanced Security and Compliance:

- Access control: Implementing robust security measures to protect sensitive data from unauthorized access.
- Compliance adherence: Ensuring compliance with industry regulations and standards (eg, GDPR,

HIPAA).
- Regular backups: Implementing regular backup procedures to safeguard data and facilitate disaster recovery.

Reduced Costs and Increased Efficiency:

- Cost optimization: Identifying and eliminating unnecessary expenses related to SQL Server administration.
- Automation: Leveraging automation tools to streamline tasks and reduce manual effort.
- Proactive maintenance: Implementing preventive maintenance strategies to minimize downtime and reduce costs.

Improved Business Agility and Decision Making:

- Data-driven insights: Providing timely and accurate data to support informed decision-making.
- Business continuity: Ensuring uninterrupted access to critical data and systems.
- Faster response times: Enabling efficient response to changing business needs and market conditions.

Benefits for You

By effectively managing MS SQL Server, you can enhance database performance, ensuring optimal data accessibility and application responsiveness. Additionally, proper administration helps safeguard sensitive information through robust security measures, mitigating the risk of unauthorized access or data breaches. Moreover, regular maintenance and optimization tasks contribute to overall system stability and reliability, minimizing downtime and ensuring business continuity. Ultimately, well-administered MS SQL Server empowers organizations to make data-driven decisions and achieve their operational goals efficiently.

Who Should Attend

Primarily designed for SQL Server database administrators and maintainers, this course is also beneficial for application developers utilizing SQL Server databases.

Course Outline

SQL Server Fundamentals

- Introduction to the SQL Server Platform
- Working with SQL Server Tools
- Configuring SQL Server Services

SQL Server Architecture and Planning

- SQL Server Architecture Overview
- Planning Server Resources
- Pre-installation Testing

Backup and Restore

- Backup Strategies and Planning
- Backing Up and Managing Databases
- Restoring Databases and Point-in-Time Recovery

SQL Server Installation and Upgrading

- Installation Preparation
- SQL Server Installation
- Upgrading and Automated Installation

SQL Server Databases

- SQL Server Databases Overview
- Managing Files and File groups
- Moving Database Files

Data Transfer

- Importing
- Exporting
- Bulk Inserting Data

Security and Auditing

- Authentication
- Authorization
- Permissions
- SQL Server Auditing

Automation and Monitoring

- SQL Server Agent and Job Management
- Database Mail
- Error Monitoring
- Alerts

Database Maintenance

- Ensuring Database Integrity and Index Maintenance
- Automated Maintenance Tasks

Performance Tuning

- SQL Server Profiler
- Database Engine Tuning Advisor
- Tracing

Advanced Features (SQL Server 2012 and later)

- Facets
- Policies
- Resource Governor
- Events

In-Memory OLTP (SQL Server 2014 and later)

- Column store Indexes
- Memory-Optimized Tables

PowerShell Automation

- SQL Server Management with PowerShell

High Availability (HA)

- Log Shipping
- Database Mirroring

High Availability (HA) and Disaster Recovery (DR)

- Failover Clustering and Always On Availability Groups

Replication

- Replication Topology
- Configuration

Database Snapshot

- Database Snapshot Overview
- Disaster Recovery

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Registration Form

Administering MS SQL Server

Preferred dates: ..... Venue or online: .....

Duration: 10 days Language: .....

Please complete and email this form to us, or register online. We confirm your place and send the invoice within one working day.

Delegate information

Full name (Mr / Ms / Dr / Eng): .....

Position: ..... Telephone / mobile: .....

Official email: ..... Personal email: .....

Company information

Company name: .....

Address: .....

City / country: ..... VAT / tax number: .....

Person responsible for training & development

Full name (Mr / Ms / Dr / Eng): .....

Position: ..... Telephone / mobile: .....

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Payment

☐ Please invoice me ☐ Please invoice my company

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Open the course page