

# Microsoft MCSA: SQL 2016 Database Administration (70-764 & 70-765)

Enhance your database administration skills with this MCSA: SQL 2016 Database Development training. Learn to deploy, configure, and manage SQL databases using both Azure SQL and SQL Server. Master key areas like security, performance optimization, data access, and storage management to improve your SQL administration expertise. Ideal for database admins looking to deepen their practical skills and advance their careers.

[CBT Nuggets course material](#) →

## WEEK 1

### Microsoft MCSA SQL Server 2016 (70-764): Overview 105 min.

|                                |   |
|--------------------------------|---|
| Introducing SQL Server 2016    | 1 |
| SQL Server 2016 Certifications | 7 |

### Microsoft MCSA SQL Server 2016 (70-764): Configure Encryption

|   |    |
|---|----|
| Configure Encryption: SQL Server Encryption                 | 1  |
| Configure Encryption: Implement Cell-Level Encryption       | 7  |
| Configure Encryption: Implement Always Encrypted            | 1  |
| Configure Encryption: Implement Backup Encryption           | 6  |
| Configure Encryption: Configure Transparent Data Encryption | 6  |
| Configure Encryption: Configure Encryption for Connections  | 7  |
| Configure Encryption: Troubleshoot Encryption Errors        | 5  |
| Configure Encryption: Lab                                   | 17 |

### Microsoft MCSA SQL Server 2016 (70-764): Configure Data Access and Permissions

|   |   |
|---|---|
| Configure Data Access and Permissions: SQL Server Data Access             | 1 |
| Configure Data Access and Permissions: Create and Maintain Users          | 1 |
| Configure Data Access and Permissions: Create and Maintain Custom Roles   | 1 |
| Configure Data Access and Permissions: Manage Database Object Permissions | 1 |
| Configure Data Access and Permissions: Configure Row-Level Security       | 1 |
| Configure Data Access and Permissions: Configure Dynamic Data Masking     | 1 |

Configure Data Access and Permissions: Configure User Options in Azure 1

Configure Data Access and Permissions: Lab 5

### Microsoft MCSA SQL Server 2016 (70-764): Configure Auditing

Configure Auditing: SQL Server Auditing 1

Configure Auditing: Configure an Audit on SQL Server 1

Configure Auditing: Query the SQL Server Audit Log 1

Configure Auditing: Manage an SQL Server Audit 1

Configure Auditing: Configure an Azure SQL Database Audit 1

Configure Auditing: Analyze Audit Logs and Reports from Azure SQL Database 1

Configure Auditing: Lab 5

### Microsoft MCSA SQL Server 2016 (70-764): Develop a Backup Strategy

Develop a Backup Strategy: SQL Server Backup 6

Develop a Backup Strategy: Backup Databases 1

Develop a Backup Strategy: Back up Very Large Databases 1

Develop a Backup Strategy: Manage Transaction Log Backups 1

Develop a Backup Strategy: Configure Database Recovery Models 1

Develop a Backup Strategy: Configure Backup Automation 10

Develop a Backup Strategy: Configure Alerting for Failed Backups 7

Develop a Backup Strategy: Back up Databases to Azure 1

Develop a Backup Strategy: Lab 5

### Microsoft MCSA SQL Server 2016 (70-764): Restore Databases

Restore Databases: SQL Server Restore 1

Restore Databases: Perform Restores 1

Restore Databases: Perform Piecemeal Restores 1

Restore Databases: Perform Page Recovery 1

Restore Databases: Perform Point-in-Time Recovery 7

Restore Databases: Restore Filegroups 1

Restore Databases: Test and Automate Restores 1

Restore Databases: Lab 5

### Microsoft MCSA SQL Server 2016 (70-764): Manage Database Integrity

Manage Database Integrity: SQL Server Database Integrity 4

Manage Database Integrity: Implement Database Consistency Checks 7

Manage Database Integrity: Identify Database Corruption 7

Manage Database Integrity: Recover from Database Corruption 5

## WEEK 2

152 min.

Manage Database Integrity: Lab 12

### Microsoft MCSA SQL Server 2016 (70-764): Monitor Database Activity

Monitor Database Activity: SQL Server Database Monitoring 1

Monitor Database Activity: Monitor Current Sessions 1

Monitor Database Activity: Identify Sessions that Cause Blocking Activity 1

Monitor Database Activity: Identify Sessions that Consume TempDB Resources 1

Monitor Database Activity: Configure the Data Collector 1

Monitor Database Activity: Lab 5

### **Microsoft MCSA SQL Server 2016 (70-764): Monitor Queries**

Monitor Queries: SQL Server Query Monitoring 1

Monitor Queries: Manage the Query Store 6

Monitor Queries: Identify Problematic Execution Plans 8

Monitor Queries: Configure Extended Events and Trace Events 9

Monitor Queries: Troubleshoot Server Health using Extended Events 4

Monitor Queries: Lab 5

### **Microsoft MCSA SQL Server 2016 (70-764): Manage Indexes**

Manage Indexes: SQL Server Index Management 1

Manage Indexes: Identify and Repair Index Fragmentation 1

Manage Indexes: Identify and Create Missing Indexes 1

Manage Indexes: Identify and Drop Underutilized Indexes 4

Manage Indexes: Manage Existing Columnstore Indexes 6

Manage Indexes: Lab 5

### **Microsoft MCSA SQL Server 2016 (70-764): Manage Statistics**

Manage Statistics: SQL Server Statistics Management 1

Manage Statistics: Identify and Correct Outdated Statistics 1

Manage Statistics: Implement Auto Update Statistics 1

Manage Statistics: Implement Statistics for Large Tables 1

Manage Statistics: Lab 5

### **Microsoft MCSA SQL Server 2016 (70-764): Monitor SQL Server Instances**

Monitor SQL Server Instances: SQL Server Instance Monitoring 1

Monitor SQL Server Instances: Configure Database Mail 1

Monitor SQL Server Instances: Create and Manage Operators 1

Monitor SQL Server Instances: Create and Manage Alerts 1

Monitor SQL Server Instances: Define Custom Alert Actions 1

Monitor SQL Server Instances: Define Failure Actions 1

Monitor SQL Server Instances: Configure Policy-based Management 1

Monitor SQL Server Instances: Identify Available Space on Data Volumes 1

Monitor SQL Server Instances: Identify the Cause of Performance Degredation 1

Monitor SQL Server Instances: Lab 5

### **Microsoft MCSA SQL Server 2016 (70-764): Implement Log Shipping**

Implement Log Shipping: SQL Server Log Shipping 4

Implement Log Shipping: Configure Log Shipping 10

Implement Log Shipping: Monitor Log Shipping 6

Implement Log Shipping: Lab 12

### **Microsoft MCSA SQL Server 2016 (70-764): Implement Always On Availability Groups**

Implement Always On Availability Groups: SQL Server Always On Availability Groups 6

Implement Always On Availability Groups: Configure Windows Clustering 6

Implement Always On Availability Groups: Create an Availability Group 12

## **WEEK 3**

**36 min.**

Implement Always On Availability Groups: Configure Read-only Routing 6

Implement Always On Availability Groups: Manage Failover 4

Implement Always On Availability Groups: Create Distributed Availability Groups 3

Implement Always On Availability Groups: Lab 14

### **Microsoft MCSA SQL Server 2016 (70-764): Implement Failover Cluster Instances**

Implement Failover Cluster Instances: SQL Server Always On Failover Cluster Instances 1

Implement Failover Cluster Instances: Configure Shared Storage 1

Implement Failover Cluster Instances: Create Failover Cluster Instances 1

Implement Failover Cluster Instances: Lab 5