

DBM031 : SQL Server 2016 Administration**หลักการและเหตุผล :**

This course provides the knowledge and skills to administer and maintain a Microsoft SQL Server 2016 database. The course focuses on teaching individuals how to use SQL Server 2016 product features and tools related to maintaining a database.

วัตถุประสงค์ :

- Plan and Install SQL Server.
- Describes the system databases, the physical structure of databases and the most common configuration options related to them.
- Prepare and Create Database
- Perform manage database
- Backup and restore databases.
- Working with SQL Server Security.
- Monitor SQL Server.
- Implement ETL Process of SQL Server.
- Implement Automate administrative tasks.
- Implement High Availability on SQL Server.

หลักสูตรนี้เหมาะสำหรับ :

The primary audience for this course is individuals who administer and maintain SQL Server databases.

ความรู้พื้นฐาน :

- Basic knowledge of the Microsoft Windows operating system and its core functionality.
- Working knowledge of Transact-SQL.
- Working knowledge of relational databases.
- Some experience with database design

เนื้อหาการอบรม :**Module 1: Installing and Configuring SQL Server**

- Overview of SQL Server 2016
- Preparing Systems for SQL Server 2016
- Installing SQL Server
- Upgrading and Automating Installation
- Working with SQL Server Tools

Module 2: Working with Databases

- Overview of SQL Server Databases
- Prepare File System and Raid disk for SQL Database
- Creating Databases
- Concept of TempDB, Data File, Log File and File Group
- Resizing Database
- Use DBCC CHECKDB to Verify Database Integrity
- Moving Databases Files with Detach - Attach

Module 3: Backup and Restoring SQL Server Databases

- Recovery Models Concept
- Planning a Backup Strategy
- Backing Up User Databases
- Working with Backup Options
- Managing Database Backups
- Understanding the Restore Process
- Restoring User Databases

- Using with Recovery, No Recovery and STANDBY mode
- Restoring System Databases and individual files
- How to restore master database
- How to restore model database
- How to restore msdb database
- Repairing SQL Server with Rebuild Database

Module 4: Implementing Security

- Overview of SQL Server Security
- Authenticating Connections to SQL Server
- Working with Server Roles
- Working with Fixed Database Roles
- Working with User-defined Databases Roles
- Authorizing User Access to Objects and Execute Code
- Configuring Permissions at the Schema Level
- Implementing SQL Server Audit
- Managing SQL Server Audit

Module 5: Monitoring SQL Server 2016

- Viewing Activity with Dynamic Management View
- Monitoring with Activity Monitor
- Capturing Resource Usage with Resource Monitor
- Collecting Capacity Planning and Performance Data with Data Collector
- Capturing Activity using SQL Server Profiler and SQL Trace
- Improving Performance with the Database Engine Tuning Advisor
- Testing Performance Change with Replaying Traces

Module 6: Transferring Data

- Overview of ETL Process
- Transferring Data To/From SQL Server
- Importing and Exporting Table Data
- Copying Database
- Considering for Bulk Import/Export
- Bulk Import/Export Tools
- BCP
- BULK INSERT
- OPENROWSET (BULK)
- Implement ETL Process with SQL Server Integration Service (SSIS)
- Control Flow (Container, Tasks and Precedence Constraints)
- Data Flow with ETL Process

Module 7: Automating SQL Server 2016 Management

- Benefit of Automation
- Working with SQL Server Agent
- Configuring of Database Mail
- Configuring Operators
- Managing with SQL Server Agent Jobs
- Automating Routing Database Maintenance
- Implementing Alerts and Notifications

Module 8: Implementing High Availability

- Introduction to High Availability
- Implementing Log Shipping
- Implementing AlwaysOn High Availability

วิทยากร :



อาจารย์สุรัตน์ เกษมบุญศิริ (surath@born2learn.net)

- NCS L.3, CompTIA Security+, ITIL Foundation v.3, CCNA
- MCT, MCITP Enterprise, MCSE +Security +Messaging

จำนวนชั่วโมงในการฝึกอบรม : 5 วัน (30 ชั่วโมง)

ช่วงเวลาฝึกอบรม : 9.00 - 16.00 น.

สถานที่ฝึกอบรม :

สถาบันวิทยากร สวทช.

เลขที่ 73/1 อาคารสำนักงานพัฒนาวิทยาศาสตร์และเทคโนโลยีแห่งชาติ (สวทช.)

ถนนพระรามที่ 6 แขวงทุ่งพญาไท เขตราชเทวี กรุงเทพฯ 10400

วิธีการสำรองที่นั่ง :

ติดต่อสำรองที่นั่งล่วงหน้า ในวัน-เวลาราชการ

โทรศัพท์: 0 2644 8150 ต่อ 81887

โทรสาร: 0 2644 8110

Website: www.NSTDAAcademy.com

E-mail: training@nstda.or.th