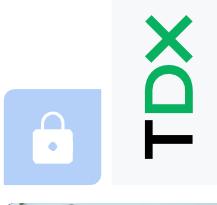


SQL Server - Advanced

TDXBI-107









ThriveDX SQL Server - Advanced

Time Commitment

3 days (total of 24 hours / 8 hours per day)

Skill Level

Advanced Level

Course Category

BI & Big Data

This course provides students with the knowledge and skills needed to maintain a SQL Server database. The course focuses on learning how to use SQL Server product features and tools related to maintaining a database

Target audience

The primary audience for this course is individuals who wish to develop applications that deliver content from SQL Server databases.

Prerequisites

- Basic knowledge of the Microsoft Windows operating system and its core functionality
- Working knowledge of SQL
- · Working knowledge of relational databases
- Experience with database design







Objectives

When completing this course, students will be able:

- Plan and implement a backup strategy
- Import and export data. Monitor SQL Server
- Manage SQL Server security
- Better understanding of queries and store procedures

Program Structure

Module 1: Using Sub-queries - 4 Hours

This module will introduce the use of subqueries in various parts of a SELECT statement. It will include the use of scalar and multi-result subqueries, and the use of the IN and EXISTS operators.

- Writing Self-Contained Subqueries
- Writing Correlated Subqueries
- Using the EXISTS Predicate with Subqueries

Module 2: Writing and using queries - 4 Hours

This module will focus on how to write and save queries. It will focus on real life situations where it is more efficient to work with a query and not with the raw data.

- What is a view?
- How we create and edit a view?
- Writing simple views
- Writing complex views

Module 3: Store Procedures - 8 Hours

This module will focus on writing procedures in SQL:

- What is a procedure?
- Write a procedure in SQL
- Understanding the basic SQL store procedure commands
- Sending and using parameters to a procedure

Module 4: Working with external files – 2 Hours

In this module, you will briefly explore tools and techniques so that you can import and export data to and from SQL Server.

- Introduction to Transferring Data
- Importing and Exporting Table Data
- Copying or Moving a Database

Module 5: Indexes - 2 Hours

- About Indexes
- CREATE & DROP INDEX Statements
- Indexes & Performance

Module 6: Indexes - 2 Hours

In this module, you will learn how to create a backup strategy that is aligned with organizational needs and learn how to perform the backup operations required by that strategy.

- Understanding SQL Server Recovery Models
- Planning a Backup Strategy
- Backing up Databases and Transaction Logs
- Using Backup Options
- Ensuring Backup Reliability

Module 7: Security - 2 Hours

In this module, you will learn about the core concepts on which the SQL Server security architecture is based, and how to manage security at the server and database levels.

- Introduction to SQL Server Security
- Managing Server-Level Security
- Managing Database-Level Principals
- Managing Database Permissions







