10985: Introduction to SQL Databases

Duration: 3 Days
Method: Instructor-Led Training (ILT) | Live Online Training

Course Description

This course describes fundamental database concepts including database types, database languages, and database designs.

Target Audience

This course is intended for:
- Persons who are (looking to) moving into a database role, or whose role has expanded to include database technologies.

Prerequisites

To attend this course, candidates must have:
- General computer literacy.

Course Objectives

Upon successful completion of this course, attendees will be able to:
- Describe key database concepts in the context of SQL Server® 2016.
- Describe database languages used in SQL Server 2016.
- Describe data modelling techniques.
- Describe normalization and denormalization techniques.
- Describe relationship types and effects in database design.
- Describe the effects of database design on performance.
- Describe commonly used database objects.

Course Topics

Module 1: Introduction to Databases

- Introduction to Relational Databases
- Other Types of Database
- Data Analysis
- Database Languages in SQL Server

Module 2: Data Modelling

- Data Modelling
- ANSI/SPARC Database Model
- Entity Relationship Modelling

Module 3: Normalization

- Fundamentals of Normalization
- Normal Form
- Denormalization

Module 4: Relationships

- Introduction to Relationships
- Planning Referential Integrity

Module 5: Performance

- Indexing
- Query Performance
- Concurrency

Module 6: Database Objects

- Tables
- Views
- Stored Procedures, Triggers and Functions

LABS INCLUDED