

# 10985: Introduction to SQL Databases

Duration: 3 Days

Method: Instructor-Led Training (ILT)

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## 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

