

## 10985 Introduction to SQL Databases

### Overview

Course is aimed at people looking to move into a database professional role or whose job role is expanding to encompass database elements. The course describes fundamental database concepts including database types, database languages, and database design

### Target Audience

The primary audience for this course is people who are moving into a database role, or whose role has expanded to include database technologies.

### Course Objectives

After completing this course, students 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 de-normalization techniques
- Describe relationship types and effects in database design
- Describe the effects of database design on performance
- Describe commonly used database objects

### Course Outline

#### 1 - Introduction to databases

Introduction to relational databases  
 Other types of database  
 Data analysis  
 Database languages  
 Lab : Querying SQ Server

#### 2 - Data Modelling

Data modelling  
 ANSI/SPARC database model  
 Entity relationship modelling  
 Lab : Entity relationship modelling

[Register Online](#)

### Schedule

Class Length: 3 Days

G2R = "Guaranteed to Run" | OLL = "Online LIVE"  
 ILT = "Instructor-Led-Training" | HDL = "Hosted Distance Learning"

11/23/20	G2R	6:00AM - 2:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$1,785.00
11/23/20	G2R	6:00AM - 2:00PM	HDL - All Locations (Pacific Time)	HDL	\$1,785.00
12/21/20	G2R	6:00AM - 2:00PM	HDL - All Locations (Pacific Time)	HDL	\$1,785.00
12/21/20	G2R	6:00AM - 2:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$1,785.00
02/01/21	G2R	8:00AM - 4:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$1,785.00
02/01/21	G2R	8:00AM - 4:00PM	HDL - All Locations (Pacific Time)	HDL	\$1,785.00
03/10/21	G2R	6:00AM - 2:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$1,785.00
03/10/21	G2R	6:00AM - 2:00PM	HDL - All Locations (Pacific Time)	HDL	\$1,785.00
04/19/21	G2R	6:00AM - 2:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$1,785.00
04/19/21	G2R	6:00AM - 2:00PM	HDL - All Locations (Pacific Time)	HDL	\$1,785.00
06/02/21	G2R	8:00AM - 4:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$1,785.00
06/02/21	G2R	8:00AM - 4:00PM	HDL - All Locations (Pacific Time)	HDL	\$1,785.00

### 3 - Normalization

Why normalize data?  
Normalization terms  
Levels of normalization  
De-normalization  
Lab : Normalizing raw data

### 4 - Relationships

Schema mapping  
Referential integrity  
Lab : Designing relationships

### 5 - Performance

Indexing  
Query performance  
Concurrency  
Lab : Query performance

### 6 - Database Objects

Tables  
Views  
Stored Procedures, Triggers and Functions  
Lab : Using SQL Server

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