

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

