

# 10985: Introduction to SQL Databases (SQL Server 2016)

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## Course Details

### Course Outline

#### 1. Introduction to databases

- Introduction to relational databases
- Other types of database
- Data analysis
- Database languages in SQL Server
- **Lab : Exploring and querying SQL Server databases**

#### 2. Data Modelling

- Data modelling
- ANSI/SPARC database model
- Entity relationship modelling
- **Lab : Identify components in entity relationship modelling**

#### 3. Normalization

- Fundamentals of Normalization
- Normal form
- Denormalization
- **Lab : Normalizing data**

#### 4. Relationships

- Introduction to relationships
- Planning referential integrity
- **Lab : Planning and implementing referential integrity**

#### 5. Performance

- Indexing
- Query performance
- Concurrency
- **Lab : Performance issues**

#### 6. Database Objects

- Tables
- Views
- Stored procedures, triggers and functions
- **Lab : Using SQL server**