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## Introduction to SQL Databases (10985)

- **Formato do curso:** Presencial e Live Training
- **Localidade:** Porto
- **Data:** 15 Jun. 2020 a 22 Jun. 2020
- **Preço:** 1150€
- **Horário:** Pós-laboral - das 18h30 às 21h30
- **Nível:** Iniciado
- **Duração:** 18 horas

This three-day instructor-led 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 designs.

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### Destinatários

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

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### Pré-requisitos

This is a foundation level course and therefore only requires general computer literacy.

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### Objectivos

- 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
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# Programa

## **Module 1: Introduction to databases**

This module introduces key database concepts in the context of SQL Server 2016.

Lessons

- Introduction to relational databases
- Other types of database
- Data analysis
- Database languages

Lab : Querying SQL Server

## **Module 2: Data Modelling**

This module describes data modelling techniques.

Lessons

- Data modelling
- ANSI/SPARC database model
- Entity relationship modelling

Lab : Entity relationship modelling

## **Module 3: Normalization**

This module describes normalization and denormalization techniques.

Lessons

- Why normalize data?
- Normalization terms
- Levels of normalization
- Denormalization

Lab : Normalizing raw data

## **Module 4: Relationships**

This module describes relationship types and effects in database design.

Lessons

- Schema mapping
- Referential integrity

Lab : Designing relationships

## **Module 5: Performance**

This module introduces the effects of database design on performance.

## Lessons

- Indexing
- Query performance
- Concurrency

Lab : Query performance

**Module 6: Database Objects**This module introduces commonly used database objects.

## Lessons

- Tables
- Views
- Stored procedures
- Other database objects

Lab : Using SQL Server in a hybrid cloud