

# Introduction to SQL Databases 2016, On Demand 10985

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Seminar



Zurzeit keine Termine



Teilnahmebescheinigung



E-Learning



24 Unterrichtseinheiten

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Seminarnummer: 29444 | Herstellernummer: OD10985

Stand: 07.10.2025. Alle aktuellen Informationen finden Sie unter <https://akademie.tuv.com/s/29444>

This On Demand online course provides 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.

Details zu MOC On Demand Trainings finden Sie unter den Hinweisen weiter unten.

## Nutzen

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 denormalization techniques
- Describe relationship types and effects in database design
- Describe the effects of database design on performance
- Describe commonly used database objects

## Zielgruppe

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

## Voraussetzungen

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

# Inhalte des Seminars

## 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

After completing this module, you will be able to:

- Describe what a database is
- Understand basic relational aspects
- Describe database languages used in SQL Server 2016
- Describe data analytics
- Describe database languages used in SQL Server 2016

## Module 2: Data Modelling

This module describes data modelling techniques.

### Lessons

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

Lab : Entity relationship modelling

After completing this module, you will be able to:

- Understand the common data modelling techniques
- Describe the ANSI/SPARC database model
- Describe 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

After completing this module, you will be able to:

- Describe normalization benefits and notation
- Describe important normalization terms
- Describe the normalization levels
- Describe the role of denormalization

Module 4: Relationships

This module describes relationship types and effects in database design.

Lessons

- Schema mapping
- Referential integrity

Lab : Designing relationships

After completing this module, you will be able to:

- Describe relationship types
- Describe the use, types, and effects of referential integrity

Module 5: Performance

This module introduces the effects of database design on performance.

Lessons

- Indexing
- Query performance
- Concurrency

Lab : Query performance

After completing this module, you will be able to:

- Discuss the performance effects of indexing
- Describe the performance effects of join and search types
- Describe the performance effects of concurrency

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

After completing this module, you will be able to:

- Describe the use of tables in SQL Server 2016
- Describe the use of views in SQL Server 2016
- Describe the use of stored procedures in SQL Server 2016
- Describe other database objects commonly used in SQL Server 2016

## Wichtige Hinweise

MOC On Demand Trainings sind original Microsoft Trainings, in denen Sie zeit- und ortsungebunden lernen können. Diese Trainings enthalten:

- Zugang zum offiziellen Microsoft Video on Demand Kurs für 90 Tage ab dem ersten Zugriff.
- Einen Lab-Online-Zugang für praktische Übungen, der ab Kauf 6 Monate gültig ist.
- Eine originale MOC Schulungsunterlage in digitaler Form, wie sie auch in den Live-Trainings eingesetzt wird.

Weitere Details entnehmen Sie unserer MOC On Demand Landingpage unter [www.tuv.com/Microsoft](http://www.tuv.com/Microsoft)

## Terminübersicht und Buchung

Buchen Sie Ihren Wunschtermin jetzt direkt online unter <https://akademie.tuv.com/s/29444> und profitieren Sie von diesen Vorteilen:

- Schneller Buchungsvorgang
- Persönliches Kundenkonto
- Gleichzeitige Buchung für mehrere Teilnehmer:innen

Alternativ können Sie das Bestellformular verwenden, um via Fax oder E-Mail zu bestellen.