

SQL Database Development

Materials & teaching in English



Build real database skills in SQL Server, Azure SQL and T-SQL, and learn to develop with AI tools alongside.

Databases are the backbone of almost every digital system. Companies store, query and rely on structured data every day, and the ability to design, develop and optimise SQL databases is a skill in steady demand across industries.

The course takes you through Microsoft SQL Server from the ground up. You start with database fundamentals: how relational databases are structured, how to write queries, and how to work with data in a way that is efficient and reliable.

From there you move into Transact-SQL. You learn to filter and modify data, work with subqueries and built-in functions, and handle the kinds of tasks that come up constantly in database development work.

The course then builds into design and architecture. You learn to structure databases that perform well, apply best practices for schemas

and indexing, and implement programmability objects like stored procedures, views and functions.

Azure SQL is covered as a dedicated module. You learn how to set up and manage a cloud-based SQL database on Microsoft Azure, which is increasingly where production databases live.

The final part of the course introduces AI-assisted development. You use tools like ChatGPT to write and refine SQL queries faster, applying prompt engineering to solve real database problems. This is not about replacing the skill, it is about working smarter with the tools that are already changing how developers work.

The course concludes with a digital certificate that documents the skills you have built.

You will learn



Database Core Concepts

- Understand how relational databases are structured
- Work with queries, tables and data aggregation
- Build a solid foundation in database theory and design



Transact-SQL and Data Querying

- Write T-SQL queries against Microsoft SQL Server
- Filter, sort and modify data with precision
- Work with subqueries, predicates and built-in functions



Database Design and Architecture

- Design multi-table architectures and efficient schemas
- Understand transaction logs and data integrity
- Apply best practices in relational database design



SQL Development and Optimisation

- Work with indexes, views and programmability objects
- Implement In-Memory tables and optimise performance
- Query XML and spatial data in SQL Server



Advanced SQL Techniques

- Create triggers, functions and stored procedures
- Tune database instances and handle complex data types
- Develop robust, production-ready SQL Server databases



Azure SQL and AI-Assisted Development

- Set up and manage Azure SQL Database instances
- Use AI tools to write and refine SQL queries faster
- Work with prompt engineering for SQL problem-solving

The course is for you if you...

- ✓ You want to work professionally with databases and are ready to build real skills in SQL Server, T-SQL and Azure SQL from the ground up.
- ✓ You have a technical interest or some prior exposure to data or programming and want a structured path into database development, ending with a digital certificate you can show to employers.

Course structure

The course includes self-paced online sessions and Labs. You also get access to a library of e-books.

Careercoach

You also can spar with Itucation's career coach regarding CV, application and job strategy. If you wish to take advantage of this offer, please send an email to kurser@itucation.dk



Upcoming courses

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Information & Pris

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| Location | E-learning, Selfstudy |
| Classes | 5 days a week |
| Duration | 6 weeks |
| Price for applicants | Free for unemployed* |
| <small>*Free, if you fulfil the criteria for 6-week job-oriented training programs via the Jobcenter</small> | |
| Price for jobcenter: | Kr. 19.600 (ex. moms) |
| Sign-up | www.itucation.dk Or contact us on 7027 2784 |

Information til a-kasser og jobcentre

Regional positivliste

E-learningkurset er godkendt.

Se vores hjemmeside for listetitel og

listenumre.

Pris

Kr. 19.600 (ex. moms)

Ugepris: kr. 3.266,66 (ex. moms)

Betalingstilsagn sendes til

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