



Learn SQL Basics for Data Science Specialization



Instructors: [Don Noxon](#) +2 more

303,312 already enrolled

3 course series

Get in-depth knowledge of a subject

4.6 ★

(10,418 reviews)

Beginner level

No prior experience required

2 months to complete

at 10 hours a week

Flexible schedule

Learn at your own pace

What you'll learn

- ✓ Use SQL commands to filter, sort, & summarize data; manipulate strings, dates, & numerical data from different sources for analysis
- ✓ Assess and create datasets to solve your business questions and problems using SQL
- ✓ Develop a project proposal & select your data, perform statistical analysis & develop metrics, and present your findings & make recommendations

Skills you'll gain

Peer Review JSON Data Lakes Complex Problem Solving Data Storytelling Presentations Database Design Databricks Data Analysis
Data Visualization Apache Spark Distributed Computing Data Modeling Statistical Analysis Data Quality Exploratory Data Analysis Data Governance
Descriptive Statistics Data Pipelines SQL [View less skills](#)

Details to know



Shareable certificate

Add to your LinkedIn profile



Taught in English

28 languages available

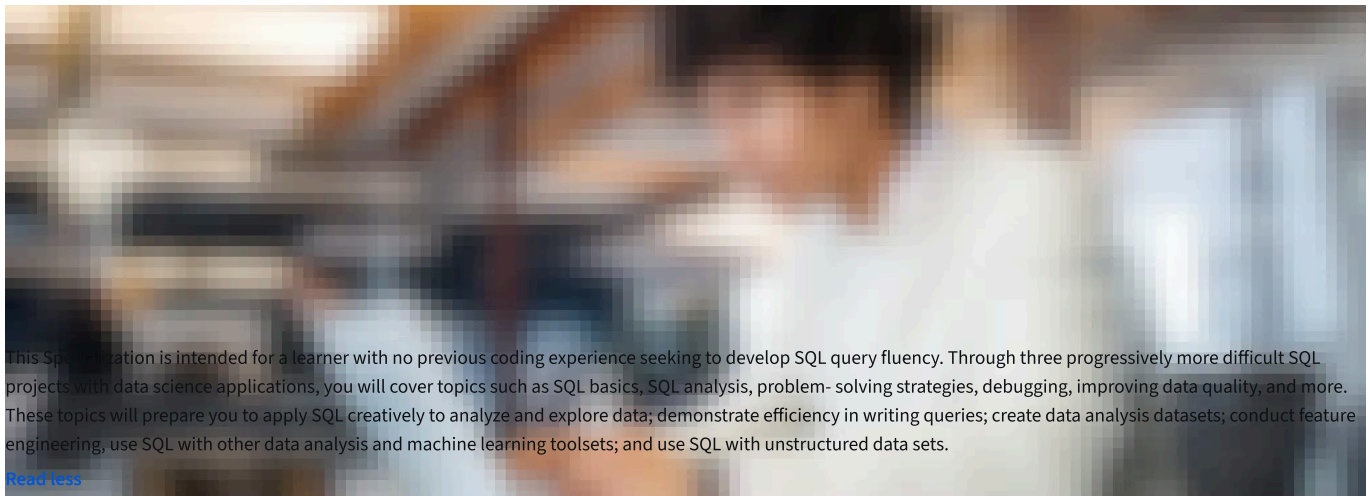


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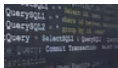
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This Specialization is intended for a learner with no previous coding experience seeking to develop SQL query fluency. Through three progressively more difficult SQL projects with data science applications, you will cover topics such as SQL basics, SQL analysis, problem- solving strategies, debugging, improving data quality, and more. These topics will prepare you to apply SQL creatively to analyze and explore data; demonstrate efficiency in writing queries; create data analysis datasets; conduct feature engineering, use SQL with other data analysis and machine learning toolsets; and use SQL with unstructured data sets.

[Read less](#)



SQL for Data Science

Course 1 • 15 hours

[Course details ^](#)

What you'll learn

- ✓ Identify a subset of data needed from a column or set of columns and write a SQL query to limit to those results.
- ✓ Use SQL commands to filter, sort, and summarize data.
- ✓ Create an analysis table from multiple queries using the UNION operator.
- ✓ Manipulate strings, dates, & numeric data using functions to integrate data from different sources into fields with the correct format for analysis.

Skills you'll gain

- SQL
- Data Governance
- Query Languages
- Relational Databases
- Data Quality
- Data Modeling
- Data Analysis
- Data Manipulation
- Data Science
- Data Transformation
- Database Design



SQL Problem Solving

Course 2 • 10 hours

[Course details ^](#)

What you'll learn

- ✓ Validate and clean a dataset
- ✓ Assess and create datasets to answer your questions
- ✓ Solve problems using SQL
- ✓ Build a simple testing framework to touch on AB Testing

Skills you'll gain

- SQL
- Data Transformation
- JSON
- Data Presentation
- Business Reporting
- Data Analysis
- Forecasting
- Data Quality
- Debugging
- Predictive Analytics
- Exploratory Data Analysis
- Data Visualization
- Complex Problem Solving
- Business Metrics



SQL for Data Science Capstone Project

Course 3 • 35 hours

[Course details ^](#)

What you'll learn

- ✓ Develop a project proposal and select your data
- ✓ Perform descriptive statistics as part of your exploratory analysis
- ✓ Develop metrics and perform advanced techniques in SQL
- ✓ Present your findings and make recommendations

Skills you'll gain

- Data Modeling
- Target Audience
- Data Manipulation
- Text Mining
- Performance Metric
- Peer Review
- Business Analytics
- Descriptive Statistics
- SQL
- Exploratory Data Analysis
- Data Storytelling
- Presentations
- Statistical Analysis
- Data Analysis
- Data Science
- Proposal Development

Earn a career certificate



Add this credential to your LinkedIn profile, resume, or CV. Share it on social media and in your performance review.

Instructors



Don Noxon

University of California, Davis

1 Course • 41,380 learners

[View all 3 instructors](#)

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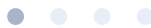
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Frequently asked questions

^ How long does it take to complete the Specialization?

This Specialization consists of 4 courses that could take anyone from 4-6 months to complete.

^ What background knowledge is necessary?

This Specialization is intended for the learner with no prior knowledge and will progress through the courses advancing their SQL skills.

^ Do I need to take the courses in a specific order?

We absolutely recommend you take the first course listed first and the Capstone project last, but courses two and three can be completed in either order.

v Is this course really 100% online? Do I need to attend any classes in person?

v Can I just enroll in a single course?

v Is financial aid available?

v Can I take the course for free?

v Will I earn university credit for completing the Specialization?

Show less ^



More questions

[Visit the learner help center](#)

Financial aid available, [learn more](#)

Skills

- Artificial Intelligence (AI)
- Cybersecurity
- Data Analytics
- Digital Marketing
- English Speaking
- Generative AI (GenAI)
- Microsoft Excel
- Microsoft Power BI
- Project Management
- Python

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