

# SQL FUNDAMENTALS COURSE & SYLLABUS INFO

## **ABOUT THE PROGRAM**

#### WHY SQL?

- SQL is the most important skill for any analytics related job
- SQL is being used in various industries as an essential data management tool
- SQL is the first analytics tool you need to master to get a job in data science/analytics



### WHO IS THIS COURSE FOR?

Students and professionals who want to learn the essential data management tool to get into the data science or analytics field Whether you're considering a new career in data science or upskilling yourself to be able to handle complex analysis beyond Excel spreadsheets, this SQL course is designed for you

For new graduates who are considering a data science/ analytics career path, this course covers real-world SQL use cases and popular interview questions to make sure you are well prepared For job candidates coming from the non-STEM background, this SQL course teaches you database and query skills to be put on your resume

#### PREREQUISITE

- There are no requirements other than a working laptop and internet connection.
- You do not need prior experience with SQL or another programming language, but it helps!
- Having an understanding of your firm's data, technologies, and goals will motivate and direct your focus in this program

#### SOFTWARE REQUIREMENTS

- MySQL 8.0 Community Edition
- MySQL Workbench
- Installation guidance will be shared after students register for the course. Our assistant instructor will make sure you have the right software installed for the course

#### **LEARNING OUTCOMES**

#### After this course, you will be able to:

- Understand the concept of relational databases and its use cases in enterprises
- Use SQL to build tables, extract data, and write complex queries to answer business questions
- Understand different SQL business use cases and most importantly how to apply best practices to real company data problems
- Gain real-world experience through 3 hands-on projects and convince your employers that you're up for more challenging data analytics projects at work
- Most importantly, you will be able to build your confidence in your SQL skills and become skilled enough to pass SQL interviews

#### **INSTRUCTORS**

#### Ken Ding

Senior Manager, Credit Risk Modeling – Decision Science @ BMO Financial Group

- MBA, Rotman School of Management, University of Toronto
- Teaching SQL and DA Specialization courses at WeCloudData
- Career development mentor

Expertise Python | SQL | Predictive Modeling| Use Cases



## **CURRICULUM**

Introduction to database

• Functions and Aggregations

Introduction to SQL

systems

week 1	WEEK 2	WEEK 3
SQL & Databases	SQL & Databases	SQL &

- Subqueries & Joins
  - Analytic Functions
  - SQL Project

#### WEEK 3 SQL & Databases

- Complex SQL Queries
- Project Presentations
- SQL Leetcode Quiz

#### **INDUSTRY USE CASES**

In this course, we not only teach students how to construct SQL queries, but also real-world business use cases. Understanding the use cases and best practices will allow the students to confidently apply SQL skills to the company's datasets.

#### **Business Use Cases**

- What does the real SQL database look like in financial institutions/retailers/telecoms?
- Why is SQL programming important for data analytics, data science, and predictive modeling?
- What does the typical data analytics workflow look like?
- SQL use cases in user payment data analysis
- SQL use cases for retail sales analysis
- SQL use cases in enterprise business intelligence
- SQL use cases for financial data analysis

## HANDS-ON PROJECTS TO PUT ON YOUR RESUME

This course is instructor-led and project-based. Students will be able to apply the SQL knowledge acquired during the lectures to a hands-on project. After implementing the end to end project, students will be able to confidently apply SQL at workplace to company's databases or put the project experience on the resume and be ready for SQL interviews.

## **PROGRAM DETAILS**

**3 WEEKS** 33 hours in total

#### WEDNESDAY

6:30PM - 9:30PM EST



#### **REAL BUSINESS CASE**

to build your your portfolio

#### SATURDAY

9:00AM - 5:00PM EST



This course is amazing, I have visited different institutions before I made my decision and comparing teachers expertise versus price WeCloudDate is undoubtedly the number one!

We can learn through market cases with technical in structions on how to solve day by day SQL and Python problems.

I fully recommend the institutions and teachers here and I also enrolled for the next module. Looking forward to it.

- Celio Oliveira -

## **TUITION, GRANTS AND FINANCE OPTIONS**

\$1,000 CAD

#### DO YOU KNOW THAT MOST EMPLOYERS WILL REIMBURSE THE TRAINING COSTS?

• We have a detailed course syllabus and email template that you can use to convince your manager that this is the right course for you and a good investment for your company

• You will have a completed project and presentation that you can use to demo to your manager and showcase your newly minted data engineering skills and get ready for more challenging projects

#### **QUESTIONS?**

Contact our program advisor, Amir, for more information **amir.asadian@weclouddata.com**