

# Intermediate SQL Analytics Career Accelerator: Prerequisites and Curriculum



## SQL Prerequisites Skills

All enrollees are **required** to possess the following foundational SQL skills prior to the start of the program – **no exceptions**. These are assumed competencies and will not be taught as introductory material:

- Database structure
- Order By (Sorting)
- Where (Filtering)
- Group By
- Aggregate functions
- Calculated fields
- Text, dates, and numeric data types

Participants must already be comfortable using these skills to explore, filter, sort, and summarize data, as they are necessary for keeping pace with the curriculum, working with real datasets, and successfully completing hands-on assignments.

## Microsoft Excel Prerequisites Skills

Participants are **required** to have basic Microsoft Excel navigation and workbook management skills before starting the program. These foundational abilities ensure learners can move efficiently through exercises, manage files, and focus on applying analytical concepts rather than learning introductory Excel mechanics.

### Required Skills:

- Office 365 familiarity
- Creating new worksheets
- Hiding worksheets
- Deleting worksheets
- Locating a specific cell
- Data entry (inputting data into a cell)
- Understanding the difference between columns and rows
- Copying and pasting data
- Opening a workbook
- Understanding the difference between a workbook vs. worksheet
- Saving a workbook
- Inserting and deleting rows and columns
- Formatting (fonts, borders, alignments, data types)

## Intermediate SQL Career Accelerator Overview

This **6-week** Intermediate SQL Career Accelerator is designed to help participants move beyond learning SQL and begin applying it in a real business environment. Participants will work with a live SQL dataset from a client's Snowflake database and update a weekly Excel sales and operations report for the largest department within one of the largest arts nonprofits in Tennessee. Throughout the program, they will strengthen their skills in joins, subqueries, unions, KPI analysis, and Excel-to-SQL workflows while completing reporting tasks that mirror real analyst responsibilities, with guidance from an eXcelerate program manager.

Participants will submit weekly updates that include an updated sales and operations report along with a detailed KPI summary for executive review. They will also take part in live working sessions where they present findings, receive feedback, and learn how to communicate insights in a business setting. The experience is structured to reflect what analysts are expected to do on the job – maintain reporting processes, analyze performance, and support operational decisions using data.

By the end of the program, participants will leave with more than technical training. They will have a recruiter-reviewed resume, guidance on how to position this experience professionally, and a portfolio that includes their SQL and Excel project work. They will also deliver a final, board-ready PowerPoint presentation demonstrating their ability to analyze real organizational data and communicate insights to leadership.

## What Participants Will Receive in the Accelerator

- Free SQL Beginner Boot Camp Retake/New Enrollment
- Free SQL Membership Enrollment
- **6-week** accelerator (**20** total **instructional hours**)
- Weekly working sessions with a program manager
- Review and apply core SQL **joins**
- Work with **partial matches** in SQL
- Write and apply **subqueries** and **unions** to extract top performing data
- Perform **KPI** analysis using **group by** and **aggregates**
- Import and work with **Excel** data in **SQL workflows**
- Analyze real business performance **metrics**
- Produce and submit **weekly reports** to the **COO**
- Participate in **two live working sessions** with the **COO**
- Present insights directly to **executive leadership**
- Deliver a final board-ready **PowerPoint** slide deck presentation based on findings from the live dataset
- **Recruiter-led resume review** session (cohort-based)
- Instruction on how to position this experience on a resume
- Support building an updated **SQL** project **portfolio**
- Support building an **Excel portfolio** showcasing analytical work

# Program Flow

## Week 1

### **Skill Refresh + Environment Setup**

Participants review core intermediate SQL concepts (joins, subqueries, unions, partial matches, group by) and get oriented to the client's Snowflake environment, reporting structure, and business KPIs.

---

## Week 2

### **Understanding the Data + Reporting Process**

Participants learn how the sales and operations reporting process works, explore the live SQL dataset, and understand how data flows into the weekly Excel report and KPI summaries.

---

## Week 3

### **Begin Applying SQL to Real Reporting**

Participants begin updating portions of the weekly SQL queries and supporting the Excel sales and operations report using guidance from the eXcelerate program manager.

---

## Week 4

### **KPI Analysis + Reporting Ownership**

Participants take a more active role in updating SQL logic, validating outputs, and preparing a detailed KPI summary to accompany the weekly report for executive review.

---

## Program Flow (Cont.)

### Week 5

#### **Insights + Executive Communication**

Participants analyze trends, identify performance insights, and present updates during live working sessions while refining how they communicate findings in a business context.

---

### Week 6

#### **Final Deliverables**

Participants finalize their contributions to the reporting process and deliver a board-ready PowerPoint presentation.

---

### Weeks 7 and 8

#### **Resume Review and Portfolio Build**

They also participate in a recruiter-led resume review and build an updated SQL and Excel portfolio showcasing their project work.

---



**DATA TELLS A STORY. BE THE STORYTELLER**