

Data Analyst Career Accelerator Program: Prerequisites and Curriculum



Beginner SQL Prerequisites Skills

Participants are **required** to have basic SQL skills prior to the start of our first day of class.

Required Skills:

- Basic data extraction using SELECT and FROM
- Sorting data (Order By)
- Filtering data (Where)
- Creating alias column names

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)

Data Analyst Career Accelerator Program Overview

This **6-week SQL & Excel Data Analyst Career Accelerator Program** is designed to help participants move beyond learning individual tools and begin applying their SQL and Excel skills in a real business environment for an existing client (**large arts nonprofit in the Southeast**).

Participants will work with a **live company database**, writing **advanced multi-table and multi-step SQL queries** to extract, combine, and analyze business data. They will then use the data extracted from SQL to complete **Excel-based reports used to monitor operational performance** for the largest department in the organization.

Throughout the program, participants will work in teams to complete **weekly business reporting assignments**, using SQL to retrieve the required data and Excel to organize, analyze, validate, and prepare the information for reporting. As part of the project, participants will be responsible for **providing weekly reporting updates and analytical insights to the organization's Chief Operating Officer (COO)**, giving them experience communicating their findings to executive leadership.

The program is designed to simulate the type of work a Data Analyst or Reporting Analyst may be responsible for in a real organization—from understanding a business reporting request and determining what data is needed, to writing the SQL queries, validating the results, completing the Excel report, and **communicating key findings to a senior business leader**.

Participants will leave the program with **real-world SQL and Excel project experience**, a **portfolio-ready analytics project**, and **guidance on how to position this experience on their resume, LinkedIn profile, and when speaking with recruiters and potential employers**.

What Participants Will Receive in the Accelerator

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- Weekly working sessions with a program manager
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- Analyze real business performance **metrics**
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- Produce and submit **weekly reports** to the **COO**
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- Present insights directly to **executive leadership**
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- **Recruiter-led resume review** session
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- **SQL GitHub portfolio** session
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- Instruction on how to position this experience on a resume and LinkedIn
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- LinkedIn recommendations from COO and eXcelerate's Program Managers
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Program Flow

Weeks 1 – 2

SQL, Excel & Reporting Workflow Setup

Build the intermediate SQL skills needed for the live company project. Participants will learn how to **JOIN and UNION multiple tables, extract data across related datasets, and build multi-step, multi-page SQL queries** using practice data.

These first two weeks will focus on strengthening participants' ability to work through more complex business questions and prepare them to begin querying the live **company database** in the following phase of the program.

Weeks 3 – 6

Live Company Reporting Project

Participants will be **assigned to project teams** and transition from practice data to applying their previously learned SQL skills in a **live business reporting environment**.

Each team will be responsible for writing and maintaining **10 SQL queries each week** to extract the data needed to update the **weekly COO report for the organization's largest department**.

Participants will gain hands-on experience working through a recurring reporting cycle—writing and validating SQL queries, updating the weekly Excel reporting file, reviewing results for accuracy, and identifying key findings from the data.

Each week will culminate in **reporting updates and analytical insights being provided to the organization's Chief Operating Officer (COO)**, giving participants experience contributing to an actual executive-level reporting process.

Post Program

Resume Review and Portfolio Build

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



DATA TELLS A STORY. BE THE STORYTELLER