

Intermediate SQL, Power BI and Excel Analytics Career Accelerator: Prerequisites and Curriculum



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 Data Analytics Career Accelerator Program Overview

This 12-week Intermediate SQL, Power BI & Excel Career Accelerator is designed to help participants move beyond learning tools and begin applying analytics in a real business environment.

Participants will work with a **live company database**, writing **advanced multi-table and multi-step SQL queries** to extract and analyze data. They will also work with **Excel files stored in SharePoint**, which serve as the data source for **Power BI dashboards used to monitor operational performance** for a department within a **large arts nonprofit in the Southeast**.

Throughout the program, participants will work in teams to **design and build a fully functional Power BI dashboard**. They will strengthen their skills in **data modeling, DAX calculations, dashboard design, and Excel-based analysis**, while ensuring their dashboards reflect **up-to-date performance metrics through weekly data updates**.

At the end of the program, each team will **present their dashboard to the organization's Chief Operating Officer**, who will evaluate the projects and select the solution that best meets the organization's reporting needs.

Participants will leave the program with **real-world project experience**, a **portfolio-ready dashboard**, and **guidance on how to position this work when speaking with recruiters and potential employers**.

What Participants Will Receive in the Accelerator

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- **12-week** accelerator (**26 total instructional hours**)
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- Weekly working sessions with a program manager
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- Import and work with **Excel** data in Sharepoint via **automated workflows**
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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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- Participate in **two – three live working sessions** with the **COO**
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- Present insights directly to **executive leadership**
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- Deliver a final **functional dashboard to COO**
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- **Recruiter-led resume review** session (cohort-based)
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- Instruction on how to position this experience on a resume
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- Support building a **Power BI portfolio** showcasing analytical work
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Program Flow

Weeks 1 – 5

SQL, Excel & Reporting Workflow Setup

Participants review key SQL and Excel concepts, including writing advanced multi-table and multi-step SQL queries to extract and structure data for reporting. They will also work with an existing Excel report template used by the organization's largest department, where they will update, maintain, and enhance the report throughout the program.

Week 6

Power BI & Environment Setup

Participants review key Power BI and Excel concepts, including data connections, data modeling, and basic DAX calculations. They will also become familiar with the SharePoint environment where Excel files are stored, the organization's reporting structure, and the key operational KPIs that will be tracked in the dashboard.

Week 7

Building the Data Model + Initial Dashboard Development

Participants begin connecting Power BI to the SharePoint-hosted Excel files, building the data model, and developing the first version of their dashboards. They will create foundational visuals and begin applying DAX calculations to analyze operational performance.

Week 8

Dashboard Development + KPI Analysis

Participants continue refining their dashboards by improving data models, enhancing visuals, and incorporating additional KPI calculations. Teams will begin shaping their dashboards to clearly communicate operational performance and insights.

Program Flow (Cont.)

Week 9 -10

Dashboard Refinement + Storytelling

Participants focus on improving dashboard usability, visual clarity, and data storytelling. Teams will refine their KPI visuals, ensure the dashboards reflect updated SharePoint data, and prepare to present their analysis in a clear and business-focused format.

Week 11

Final Dashboard Presentation

Teams present their fully functional Power BI dashboards to the organization's Chief Operating Officer, demonstrating how their dashboards track key operational KPIs and support decision-making. The COO will evaluate the dashboards and select the one that best meets the organization's reporting needs.

Week 12

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