(eXcelerate)

Data Analytics Curriculum (SQL + Excel + Tableau)

Part I: Extracting Data via SQL

In the first portion of the Bootcamp, you will utilize SQL to extract data from a database.

Course 1: Database and Table Review

- Review of databases, data types, and table files

Course 2: Sorting Data

- Sorting data
- Retrieve Data from a Single Table

Course 3: Filtering Data

- Utilize conditional operators to filter data using WHERE

Course 4: Recap, Calculations, and Aggregations

- Calculate formulas using mathematical operations and aggregate functions
- ***More*** data filtering

Course 5: Summarizing Data

- Summarizing data using GROUP BY function

Course 6: GROUP BY Review

- Review of more GROUP BY exercises

Course 7: Retrieving Data from Multiple Tables (Part 1)

- Extract data from multiple tables at once using joins

Course 8: Retrieving Data from Multiple Tables (Part 2)

- Overview of previously discussed joins topics

Part II: Analyzing Data in Excel

In the second portion of the Bootcamp, you will export data from SQL into Excel. From here, you will create reports and analyze data while utilizing basic to intermediate formulas and pivot tables.

Course 1: Importing Data

- Import data from SQL into Excel
- Overview of inherited data
- Copying/moving worksheets

Course 2: Basic Math Operations

- Cell Referencing
- Basic math operations (sum, average, sumproduct, etc.)
- Sorting/Filtering

Course 3: VLOOKUP

- Review one of the most popular formulas in Excel!

Course 4: If Statements (Part 1)

- Learn how to write basic if/then statements

Course 5: If Statements (Part 2)

- Learn how to wrap multiple if statements into one
- Perform nested if statements
    - Combining multiple formulas/functions in if statements

Course 6: Pivot Tables (Part 1)

- Building and design of pivot tables
- Design layouts
- Data sources and refreshing connections

Course 7: Pivot Tables (Part 2)

- ***More*** building and design of pivot tables

TABLEAU

Part III: Visualizing Data in Tableau

In the third and final portion of the Bootcamp, you will visualize data in Tableau. Tableau brings your data to life with dynamic charts and graphs that can be used to visually tell a story.

Course 1: Connecting and Importing Data

- Understand Tableau and its components
- Import multiple data sets via Excel and text files
- Creation of visualizations using different charts and graphs

Course 2: Filtering and Sorting

- Filter data in visualizations
    - Top/bottom
    - Advanced filtering
    - Pages

Course 3: More Filtering + Formatting

- Review of more filtering and formatting exercises