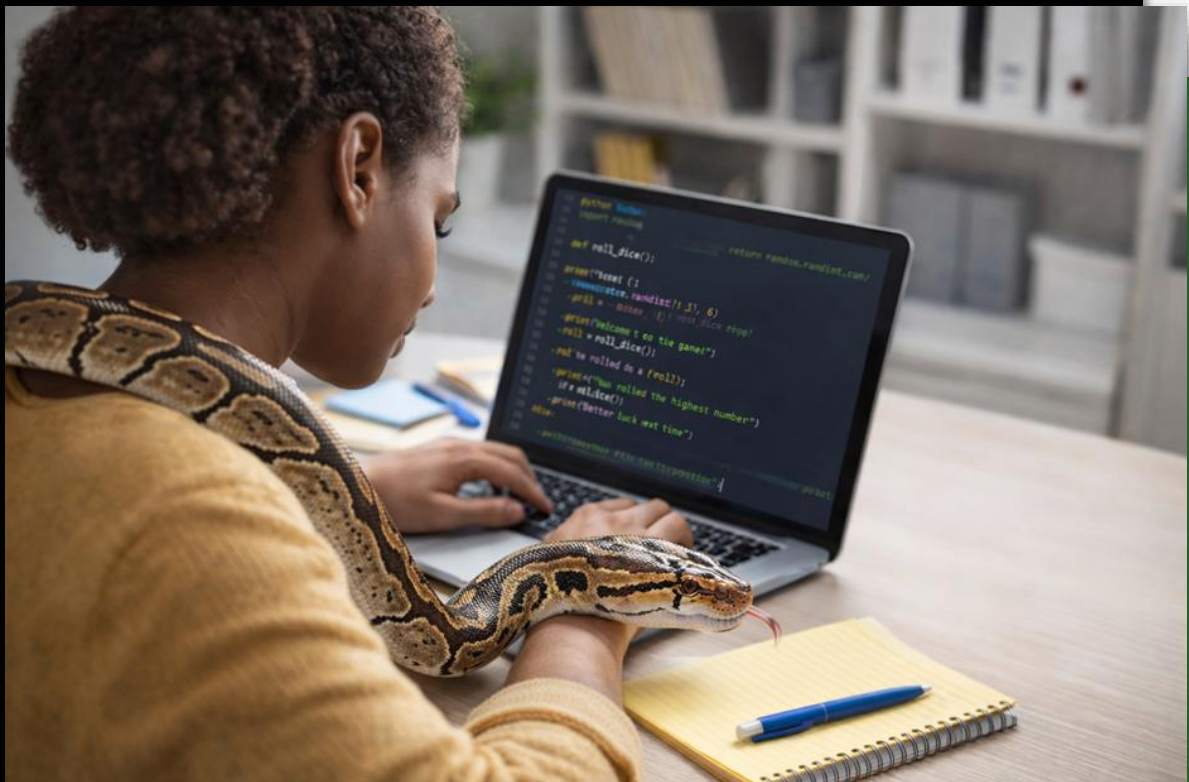


Intermediate Python Training Curriculum



What will the training cover?

This boot camp is designed to help students gain a comprehensive understanding of the data analytics cycle through automation using **SQL** and **Python**. The program begins with a strong foundation in SQL, where students will learn how to extract data efficiently from databases. They will start with the basics, writing simple queries to retrieve and manipulate data. As they progress, they will build upon their skills, advancing from beginner to intermediate SQL concepts and ultimately mastering more complex SQL functions. By the end of this phase, students will transition from writing basic one-page queries to constructing multi-page queries of up to three pages, enabling them to extract and analyze large datasets effectively.

Once students develop proficiency in SQL and learn how to work with complex queries, they will move on to the Python for automation module. This phase focuses on using Python to streamline data workflows and automate repetitive tasks. Students will learn the fundamentals of Python, including scripting, working with databases, and handling various data file types such as CSVs and Excel files stored in shared drives. Through hands-on exercises, they will integrate Python with SQL databases, allowing them to automate data extraction, transformation, and loading (**ETL**) processes.

The final stage of the boot camp will bring all concepts together, where students will develop an automated Python application that connects to an SQL database, retrieves data, and seamlessly integrates it into a pre-built Excel report. This project will provide practical, real-world experience in automating data processes, preparing students for careers in data analytics, business intelligence, and automation. By the end of the training, students will not only have strong technical skills in SQL and Python but also the ability to design and implement efficient, automated data solutions that optimize business processes.

Training Topics

During this portion of the training, you will complete **16 hours** of intermediate Python instruction focused on business process automation and SQL integration. You'll learn how to use Python to automatically execute SQL queries on a scheduled basis, retrieve data from a SQL database, and export query results directly to shared Google Drive folders without manual intervention.

By the end of this module, you'll be able to build automated reporting solutions that streamline recurring data extraction and delivery processes commonly used by business analysts and data professionals.

Write and execute automated SQL queries with Python

Schedule automated SQL query execution

Upload query reports to shared Google Drive folders

Troubleshoot and monitor automated scripts



DATA TELLS A STORY. BE THE STORYTELLER