

Python and Tableau Workshop: Training Curriculum



What will the training cover?

The **5-hour Python + Tableau: From Data to Dashboard Workshop** is designed to introduce students to an end-to-end data analytics workflow using **Python, Pandas, and Tableau**. Students will learn how to use Python and Pandas to import, clean, organize, and prepare data for analysis before bringing the cleaned dataset into Tableau for visualization. Through hands-on exercises using pre-filled Google Colab notebooks, students will work with DataFrames, clean and standardize data, handle missing values and duplicates, and prepare an analysis-ready dataset. Students will then connect their prepared data to Tableau and learn how to create visualizations, apply filters, and combine their visuals into an interactive dashboard.

By the end of the workshop, students will have practical experience using **Python and Pandas for data preparation** and **Tableau for data visualization**, while understanding how the tools can work together to transform raw data into a polished, interactive dashboard that communicates meaningful business insights.

Software Requirements

Office 365

Google Account

Tableau Public (Free)

Prerequisites

No previous Python experience required

No programming experience required

Basic experience working with Excel spreadsheets

Students should have **basic experience** navigating and working in **Tableau**, including familiarity with creating standard visualizations and building a basic dashboard.

Training Topics

Understand Python, Pandas, and DataFrames for working with structured data

Clean and standardize text values using Python

Select, rename, reorder, and remove columns within a dataset

Filter and remove unnecessary rows based on specific conditions

Identify and remove duplicate records and blank values

Prepare messy datasets for accurate and efficient data analysis

Execute and modify Python code using pre-filled Google Colab notebooks

Export cleaned, analysis-ready datasets for future use



DATA TELLS A STORY. BE THE STORYTELLER