

# Introduction to Python for Workforce and Economic Developers

May 25<sup>th</sup>, June 1<sup>st</sup>, June 20<sup>th</sup>, and 21<sup>st</sup>  
From 3:00 PM – 5:00 PM ET (Virtual)

After taking this course, participants will be able to: read in and reshape datasets; join two data sets; perform basic problem solving; make a plot; write a file output.

## AGENDA

### Session 1: Introduction

- Introduction to Spyder
- Introduction to Python language
- Python data types and structures
- Overview of Python packages
- Pandas essentials for data analysis

### Session 2: Reading, Filtering, and Joining Data

- Import a CSV and an Excel data files
- Exploratory data analysis
- Use of Loops and If statements
- Joining tables
- Export output to a CSV and Excel spreadsheet

### Session 3 – Part 1: Reshaping, Summarizing, and Visualizing Data

- How to create and use Pivot tables
- Introduction to Data visualization with Python
- Optimization process with Numpy

### Session 4 – Part 2: Bringing It to the Real World

- Introduction to importing scripts with functions
- How to work with APIs
- Introduction to Census/BLS python libraries