

Introduction to Python for Workforce and Economic Developers

May 25th and June 1st 3-5pm EST (Virtual)
June 12th 9:30am-5:00pm EST @ Detroit, Michigan (in-person)

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