Python for Data Science Course Online (Self-Paced)

Unlock the power of Python for data-driven decision-making as you master Python programming fundamentals and dive into data analysis. Acquire essential skills to clean and manipulate data, create insightful visualizations, and perform statistical analysis, all through hands-on projects with real-world datasets.

Group classes in Live Online and onsite training is available for this course. For more information, email onsite@graduateschool.edu or visit: https://www.graduateschool.edu/courses/python-data-science-online

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Course Outline

Python Fundamentals

Data Types & Variables
- Statements & Expressions
- Variables
- Integers & Floats
- Strings

Data Structures & Attributes
- Functions & Methods
- Lists
- Indexing & Slicing
- Booleans

Structuring Programs

Complex Data Structures & Control Flow
- Dictionaries
- Conditional Statements
- For Loops
- Creating Functions

Packages & Object Oriented Programming
- Classes & Objects

- Modules & Imports
- Packages & Documentation

Arrays & Dataframes

Numpy
- Arrays
- Universal Functions
- Boolean Indexing

Pandas
- Pandas Dataframes
- Pandas Series & dtypes
- Column Manipulation
- Descriptive Statistics

Analyzing & Visualizing Data

Data Analysis
- Filtering & Cleaning Data
- Groupby Operations
- Pivot Tables

Data Visualization
- Plotting with Matplotlib
- Bar Charts
- Scatter Plots
- Histograms
- Customizing Visualizations