COURSE SYLLABUS

Python for Automation (Self-Paced)

Learn how to use Python to extract data from websites and write loops for processing a large number of pages. This course covers topics such as HTML and CSS, Python fundamentals, web scraping exercises, storage and scheduling, and real-life examples of scraping valuable data.

> Group classes (Live Online) and onsite training are available for this course. For more information, email onsite@graduateschool.edu or visit: https://sdfm.graduateschool.edu/courses/python-automation-online



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Course Outline

Section 1

Introduction to HTML/CSS (Online)

- How a website is served
- Anatomy of a web page
- HTML tags
- IDs
- CSS classes

Python Part 1

- Integers + Floats
- Variables
- Strings
- Methods + Functions

Section 2

Webscraping Exercise Part 1

- Introduction to using packages
- Requests packages
- Performing a GET request
- String manipulation
- Debugging a Python script

Python Part 2

- Booleans

- Conditional Statements
- Lists
- Indexing into strings + lists
- Looping over lists

Section 3

Webscraping Exercises Part 2

- Beautiful Soup package
- Honing in on data
- Common webscraping pitfalls
- Using loops in webscraping

Storage and Scheduling

- Text files
- CSVs
- Scheduling a Python Script