

A dark-themed image showing a snippet of Python code. The code includes a class method with a docstring, an if statement for key presses, and menu label color updates. The text 'Python for Data Science, Web and Core Programming' is overlaid in large white font.

Python for Data Science, Web and Core Programming

Designed for beginning and intermediate programmers, the Python for Data Science, Web and Core Programming Professional Concentration provides a strong foundation and understanding in Python programming. Whether you're looking to enhance your career or you're interested in a career in data science or computer programming, this online program will give you the hands-on experience and confidence you need to succeed.

- **Knowledgeable instructors**—Learn from veteran data scientists from a variety of industries
- **Immediate ROI**—Gain hands-on experience with practical application and learn skills that are in high demand across many industries, giving you flexibility in the job market
- **Networking opportunities**—Connect with instructors and fellow students who can help you advance your career
- **Convenient, online learning**—Engaging, interactive format allows you to learn from the comfort of your own home

For more information or to enroll
cpe.ucdavis.edu/pythonpc

Program at-a-Glance

- Complete in as few as 9 months
- 5 online classes
- Individual course: \$560-740 /each
- Entire program: \$2,992-3,520

Python is the
most wanted new
software skill by
tech professionals.

2020 StackOverflow Survey

Industry Facts

The average salary for software developers, applications is **\$103,000**

Projected job growth for software developers, applications from 2019-2029 is **27.2%**

—Economic Modeling Specialists Intl.

Your Academic Path

Introduction to Python Programming

2.0 quarter units academic credit, X405.15

Typically Offered: Quarterly

Through remote lectures, group discussions and hands-on activities, this beginner course will give you a foundational understanding of programming and open doors for professional development. By the end of this course, you will have enough technical knowledge and programming experience to further explore Python or any other programming language, either on your own or in more advanced courses. Prerequisite: None

Intermediate Python

2.0 quarter units academic credit, X405.16

Typically Offered: Fall, Spring

Strengthen your skills by diving into essential data science applications of programming. Learn the basics of object-oriented programming using Python and become familiar with concepts such as recursion, linear data structures, trees, graphs, maps and hash tables. By the end of this course, you will be able to develop algorithms and think computationally when solving data-related problems. Prerequisite: *Introduction to Python Programming or Python for Data Analysis*

Python Data Structures, Data Mining and Big Data

2.0 quarter units academic credit, X405.17

Typically Offered: Winter, Summer

Through lectures, group discussions and hands-on activities, explore how the Python built-in data structures such as lists, dictionaries and tuples can be used to perform increasingly complex data analysis while creating regression and cluster models for data mining. Prerequisite: *Intermediate Python*

Python for Data Analysis

1.5 quarter units academic credit, X405.18

Typically Offered: Winter, Summer

Learn the basics of the Python language and how to ingest data, produce plots and analysis and fit models. By the end of this course, you will be able to immediately apply your new skills to perform basic data analysis tasks in Python. Prerequisite: *Introduction to Python Programming*; knowledge of Python programming is required

Data Preparation, Modeling and Visualization with Python

2.0 quarter units academic credit, X408.19

Typically Offered: Fall, Spring

Learn how to create business value by effectively importing, preparing, modeling and visualizing data using Python. This course will primarily cover the Python packages pandas and scikit-learn, which will provide a useful toolkit for professionals in machine learning, data science, data mining or web data fields. Prerequisite: *Introduction to Python Programming or Python for Data Analysis*

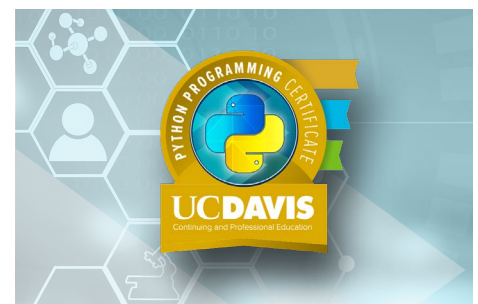
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TRACK**

LEARN AND SAVE!

The Python for Data Science, Web and Core Programming Professional Concentration **Fast Track** option is a convenient way to accelerate your training and quickly advance your career.

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- Save 15% with our pre-pay pricing option

cpe.ucdavis.edu/pythonpc



Earn a Badge

Earn a digital badge for your LinkedIn profile that demonstrates your mastery of this subject area.

Learn more

For More Information

Call (800) 752-0881

Email cpeinfo@ucdavis.edu

Schedule a consultation
calendly.com/cbabowal