

# Python for Data Analysis

Designed for beginning and intermediate programmers, the Python for Data Analysis 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 and software engineers 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](https://cpe.ucdavis.edu/pythonpc)



**UCDAVIS**  
Continuing and Professional Education

## Program at-a-Glance

- Complete in as few as 9 months
- 5 online classes
- Individual course: \$740 each
- Entire program: \$3,700 or \$3,145 with 15% Fast Track Discount



## Earn a Badge

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

[Learn more](#)

## 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: Spring, Fall

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: Spring, Fall

Strengthen your skills by diving into essential data science applications of programming. You will set up your own Python development environment like professionals do, including installing the best distributions of Python, creating your own virtual environments, installing packages, and connecting all of this to your own Integrated Development (IDE) software. Prerequisite: *Introduction to Python Programming* or *Python for Data Analysis*

### Python for Data Analysis

2.0 quarter units academic credit, X405.18

Typically Offered: Summer, Winter

Gain an introduction to basic data analysis applications of Python for those with little or no programming experience. Learn how to ingest and clean data, plot basic graphs and fit regression-based models. You'll also get an introduction to various Python libraries and learn how to import data and manipulate it efficiently. Prerequisite: *Introduction to Python Programming*; knowledge of Python programming is required

### Introduction to Machine Learning with Python

2.0 quarter units academic credit, X408.19

Typically Offered: Summer, Winter

Develop practical applications such as search engines, image analysis, bioinformatics, industrial automation and speech recognition. Examine machine learning concepts, gain a basic understanding of supervised machine learning and Bayesian classifiers, learn concepts in unsupervised machine learning and clustering algorithms, and apply neural networks to machine learning. Prerequisite: *Introduction to Python Programming* or *Python for Data Analysis*

### Data Structures and Data Mining with Python

2.0 quarter units academic credit, X405.17

Typically Offered: Spring, Fall

Gain foundational knowledge and hands-on experience to build a portfolio through data engineering pipelines, data science workflows, and machine learning and deep learning operations for artificial intelligence application deployment. Prerequisite: *Intermediate Python*



### LEARN AND SAVE!

The Python for Data Analysis Professional Concentration **Fast Track** option is a convenient way to accelerate your training and quickly advance your career.

- Earn your certificate online in 9 months
- Save 15% with our pre-pay pricing option

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

2020 StackOverflow Survey

### FOR MORE INFORMATION

Talk to an enrollment coach today to learn more about how you can benefit from the program!

EMAIL [cpecoach@ucdavis.edu](mailto:cpecoach@ucdavis.edu)

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