



Python Scripting for DevOps Specialization

Learn to develop and deploy software using Python. This specialization will provide you with foundation in the fundamentals of programming, including knowledge and skills essential for a career in software engineering, information technology and data science.



Instructor: [Aspen Olmsted](#)

7,517 already enrolled

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4 course series

Get in-depth knowledge of a subject

4.1 ★

(188 reviews)

Beginner level

Recommended experience



4 weeks to complete

at 10 hours a week

Flexible schedule

Learn at your own pace

What you'll learn

In the first course, you will learn some of the concepts of procedural programming: user input, console output, variable declaration and assignment, decision branching and iteration.

The second course will introduce you to Advanced String Operations and Dates, Modeling Classes, Development of Classes and Collections. In the third course you'll learn about Files, Inheritance and external libraries.

And in the final course we will look at several automation concepts in DevOps with Python.

Applied Learning Project

In the Python Scripting for DevOps Specialization, the hands-on labs in each course will allow you to apply the material in the lectures in simple computer programs designed to re-enforce the material in the lesson. These labs are browser-based and do not require a local environment to be installed.

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Skills you'll gain

- Computer Programming
- Python Programming
- Test Automation
- Data Visualization
- Matplotlib
- CI/CD
- Package and Software Management
- Pandas (Python Package)
- Development Testing
- Scripting
- Data Structures
- Unit Testing
- Programming Principles
- Software Testing
- DevOps
- Docker (Software)
- Containerization
- Data Modeling
- Unified Modeling Language
- Data Manipulation
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Details to know



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- Learn in-demand skills from university and industry experts
- Master a subject or tool with hands-on projects
- Develop a deep understanding of key concepts
- Earn a career certificate from LearnQuest

Specialization - 4 course series

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[Introduction to Python Scripting for DevOps](#)

Course 1 • 17 hours

[Course details ^](#)

[What you'll learn](#)

- ✓ Develop computer programs that utilize classes and objects to solve business and mathematical problems

Skills you'll gain

Scripting Python Programming Computer Programming Programming Principles Command-Line Interface Debugging Microsoft Visual Studio



Python Scripting: Dates, Classes and Collections

Course 2 • 14 hours



Python Scripting: Files, Inheritance, and Databases

[Course details ^](#)

Course 3 • 12 hours

What you'll learn

- ✓ Develop computer programs that utilize classes and objects to solve business and mathematical problems

Skills you'll gain

Python Programming Object Oriented Programming (OOP) Matplotlib Data Manipulation File Management NumPy Scripting
Pandas (Python Package) Data Import/Export Database Application Scripting Languages Data Visualization Databases



DevOps and Build Automation with Python

Course 4 • 13 hours



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Instructor



Aspen Olmsted

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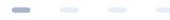
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Frequently asked questions

^ How long does it take to complete the Specialization?

To complete all four courses in the specialization, you will spend 4-6 hours per week for 16 weeks.

▼ What background knowledge is necessary?

^ Do I need to take the courses in a specific order?

Yes, because each course builds on the prior course, we recommend that you take them in order.

▼ Will I earn university credit for completing the Specialization?

▼ What will I be able to do upon completing the Specialization?

▼ Is this course really 100% online? Do I need to attend any classes in person?

▼ Can I just enroll in a single course?

▼ Is financial aid available?

⌄ Can I take the course for free?

Show less ⌂



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More questions



[Visit the learner help center](#)

Financial aid available, [learn more](#)

Skills

Artificial Intelligence (AI)
Cybersecurity
Data Analytics
Digital Marketing
English Speaking
Generative AI (GenAI)
Microsoft Excel
Microsoft Power BI
Project Management
Python

Certificates & Programs

Google Cybersecurity Certificate
Google Data Analytics Certificate
Google IT Support Certificate
Google Project Management Certificate
Google UX Design Certificate
IBM Data Analyst Certificate
IBM Data Science Certificate
Machine Learning Certificate
Microsoft Power BI Data Analyst Certificate
UI / UX Design Certificate

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Career Aptitude Test
Examples of Strengths and Weaknesses for Job Interviews
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