



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](#)

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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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- 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 3 • 12 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

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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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.

v 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.

v Will I earn university credit for completing the Specialization?

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

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

v Can I just enroll in a single course?

v Is financial aid available?

Can I take the course for free?

Show less

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

Industries & Careers

- Business
- Computer Science
- Data Science
- Education & Teaching
- Engineering
- Finance
- Healthcare
- Human Resources (HR)
- Information Technology (IT)
- Marketing

Career Resources

- Career Aptitude Test
- Examples of Strengths and Weaknesses for Job Interviews
- High-Income Skills to Learn
- How Does Cryptocurrency Work?
- How to Highlight Duplicates in Google Sheets
- How to Learn Artificial Intelligence
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