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LearnQuest

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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Starts Dec 1

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.

Read less

Skills you'll gain

Computer Programming | Development Testing | Scripting | Data Visualization | Package and Software Management | CI/CD | Matplotlib | Data Structures

Programming Principles | Software Testing | Unified Modeling Language | Docker (Software) | Containerization | Data Modeling | Data Manipulation | DevOps

Test Automation | Python Programming | Pandas (Python Package) | Unit Testing | View less skills

Details to know

in
Shareable certificate
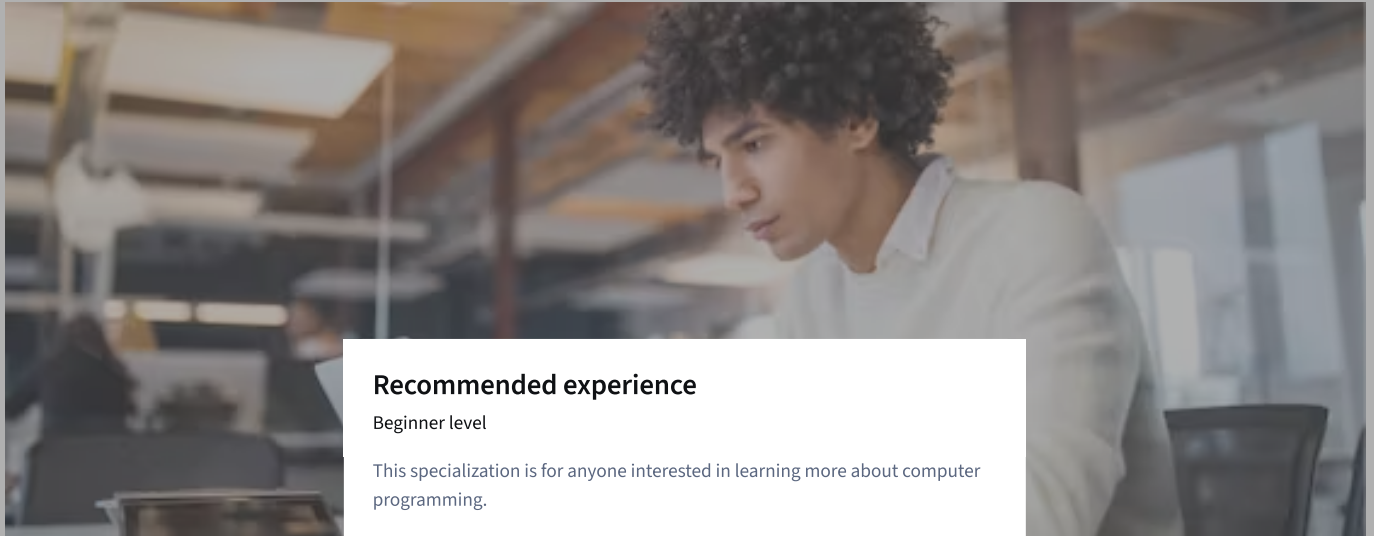Add to your LinkedIn profile

▦ **Taught in English**
21 languages available

Recommended experience ✕

Beginner level

This specialization is for anyone interested in learning more about computer programming.

OK

See how employees at top companies are mastering in-demand skills

Capgemini●   P&G   L'ORÉAL

Recommended experience

Beginner level

This specialization is for anyone interested in learning more about computer programming.

Advance your subject-m

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

Specialization - 4 course series

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Applied Learning Project

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Read less

PY

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

Python Scripting: Dates, Classes and Collections

Course 2 • 14 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 Unified Modeling Language Data Structures Object Oriented Programming (OOP) Scripting Software Design

Software Engineering Data Modeling Computer Programming

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 m

Skills you'll gain

Object Oriented Programming (OOP) ent Data Import/Export

Data Visualization Databases

DevOps and Bui

Course 4 • 13 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

DevOps Scripting Package and Software Management Containerization Python Programming Docker (Software) Unit Testing

Integration Testing Test Automation Software Testing CI/CD Development Testing Web Scraping

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performance review.

Instructor

Aspen Olmsted
LearnQuest
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Offered by

Recommended experience

Beginner level

This specialization is for anyone interested in learning more about computer
programming.

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Recommended experience

Beginner level

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Upskill your employees to excel in the digital economy

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?**

Familiarity of computers is recomme   basics.

⌃ **Do I need to take the courses i**

Yes, because each course builds on th

⌃ **Will I earn university credit for**

No, this is not a University course.

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

You will be able to write, test and deploy programs using the Python language.

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

This course is completely online, so there's no need to show up to a classroom in person. You can access your lectures, readings and assignments anytime and anywhere via the web or your mobile device.

⌄ **Can I just enroll in a single course?**

Yes! To get started, click the course card that interests you and enroll. You can enroll and complete the course to earn a shareable certificate. When you subscribe to a course that is part of a Specialization, you're automatically subscribed to the full Specialization. Visit your learner dashboard to track your progress.

⌃ **Is financial aid available?**

Yes. In select learning programs, you can apply for financial aid or a scholarship if you can't afford the enrollment fee. If fin aid or scholarship is available for your learning program selection, you'll find a link to apply on the description page.

⌄ **Can I take the course for free?**

No, you cannot take this course for free. When you enroll in the course, you get access to all of the courses in the Specialization, and you earn a certificate when you complete the work. If you cannot afford the fee, you can apply for financial aid.

Recommended experience

Beginner level

This specialization is for anyone interested in learning more about computer programming.

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?

Recommended experience
Beginner level

This specialization is for anyone interested in learning more about computer programming.

What is Artificial Intelligence?

Coursera

Community

More

Recommended experience

Beginner level

This specialization is for anyone interested in learning more about computer programming.

Recommended experience

Beginner level

This specialization is for anyone interested in learning more about computer programming.