

Document Generated: 07/27/2024 Learning Style: Virtual Classroom Provider: Difficulty: Advanced Course Duration: 3 Days

# Python® Programming: Advanced (LO-94012)



# About this course:

Python® keeps on being a well-known programming language, possibly because of its capacity to complete a ton of work in a few lines of code, and its flexibility. Python is helpful for creating custom software applications, tools, cloud applications, and web services. With this course you can expand upon your fundamental Python abilities, learning further developed topics, for example, development of graphical user interfaces, object-oriented programming patterns, threading, unit testing, data management, and installing as well as creating packages and executable applications.

The normal pay for Python Developer is \$115,222 every year.

# **Course Objectives:**

- Store information in a database from applications of Python.
- Plan and make a GUI.
- Make object-oriented applications of Python.
- Deal with numerous procedures with threading.
- Communicate utilizing server/client protocols of the network.
- Execute unit testing.

# Audience:

This course is intended for existing programmers of Python who have minimum experience of one year in Python programming and who need to grow their proficiencies in Python.

# **Prerequisites:**

You ought to have involvement in Python and object-oriented programming.

# **Course Outline:**

# Lesson 1: Using Object-Oriented Python

Topic A: Create and Use Classes in an Application

Topic B: Use Magic Methods

Topic C: Incorporate Class Factories

# Lesson 2: Creating a GUI

Topic A: Design a GUI

Topic B: Create and Arrange a GUI Layout

Topic C: Interact with User Events

# Lesson 3: Using Databases

**Topic A:** Basics of Data Management

Topic B: Use SQLite Databases

Topic C: Manipulate SQL Data

# Lesson 4: Network Programming

- Topic A: Basics of Network Programming
- Topic B: Create a Client/Server Program

# Lesson 5: Managing Multiple Processes with Threading

- Topic A: Create a Threaded Application
- Topic B: Manage Thread Resources

# Lesson 6: Implementing Unit Testing

- Topic A: Test-Driven Development
- Topic B: Write and Run a Unit Test Case
- Topic C: Create a Test Suite

# Lesson 7: Packaging an Application for Distribution

- Topic A: Create a Package Structure
- Topic B: Generate the Package Distribution Files
- Topic C: Generate a Windows Executable

# **Credly Badge:**



# Display your Completion Badge And Get The Recognition You Deserve.

Add a completion and readiness badge to your Linkedin profile, Facebook page, or Twitter account to validate your professional and technical expertise. With badges issued and validated by Credly, you can:

- Let anyone verify your completion and achievement by clicking on the badge
- Display your hard work and validate your expertise
- Display each badge's details about specific skills you developed.

Badges are issued by QuickStart and verified through

Credly.

Find Out More or See List Of Badges