

Document Generated: 04/29/2025

Learning Style: On Demand

Technology:

Difficulty: Intermediate

Course Duration: 4 Hours

## Python Part 2: Tools, Modules, and JSON



### About this course:

The Python Tools, Modules and JSON course will enable the students to learn the more advanced concepts of writing and running Python scripts. The course builds on the Python Fundamentals course and covers the more complex topics such as iterators and generators, regular expressions, introspection and lambda functions, metaclasses and decorators, and using the extensive functionality of Python modules. Extra emphasis is placed on features unique to Python, such as metaprogramming and JSON. After completing this course, the students will immediately be able to use Python to complete tasks in the real world.

The Python Tools, Modules and JSON course will comprehensively cover the more

advanced topics related to the Python programming language with primary focus on the several tools, modules and JSON. The course enables the students to code efficient scripts to solve the real-world problems using the advanced features of Python.

### **Course Objective:**

- Create working Python scripts following best practices
- Use python iterators and generators appropriately
- Use regular expressions, lambda functions and decorators
- Search and replace text with regular expressions
- Work with modules and packages including APIs
- Learn metaprogramming
- Understand the structure of XML and JSON

### **Audience:**

- Advanced level programmers
- System administrators who want to use Python to support their server installations
- Website administrators who want to use Python to support their web-servers
- IT professionals who want to automate or simplify common tasks with the use of Python scripts

### **Prerequisite:**

- The Python Tools, Modules and JSON is part of the two-course series on Python.
- The candidates wishing to register for this course are required to have completed the Python Fundamentals course.
- In addition to this, a basic understanding of the Python language and standard library is also recommended.

### **Course Outline:**

- **Chapter 01 - Programming Tools**
- **Chapter 02 - Modules and Packages**
- **Chapter 03 - Metaprogramming and JSON**

### **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](#)