

[Read less](#)

### Crash Course on Python

Course 1 • 26 hours • 4.8★ (31,248 ratings)

Course details

#### What you'll learn

- ✓ What Python is and why Python is relevant to automation
- ✓ How to write short Python scripts to perform automated actions
- ✓ How to use the basic Python structures: strings, lists, and dictionaries
- ✓ How to create your own Python objects

#### Skills you'll gain

Basic Python Data Structures   Fundamental Programming Concepts   Basic Python Syntax   Python Programming   Object-Oriented Programming (OOP)

### Using Python to Interact with the Operating System

Course 2 • 25 hours • 4.7★ (5,480 ratings)

Course details

#### What you'll learn

- ✓ Setup, configure, and use your own developer environment in Python
- ✓ Manipulate files and processes running on the Operating System using Python
- ✓ Understand and use regular expressions (regex), a powerful tool for processing text files
- ✓ Know when to choose Bash or Python, and create small scripts using Bash

#### Skills you'll gain

Setting up your Development Environment   Regular Expression (REGEX)   Testing in Python   Automating System Administration Tasks with Python   Bash Scripting

### Introduction to Git and GitHub

Course 3 • 15 hours • 4.8★ (6,688 ratings)

Course details

#### What you'll learn

- ✓ Understand why version control is a fundamental tool for coding and collaboration
- ✓ Install and run Git on your local machine
- ✓ Use and interact with GitHub
- ✓ Collaborate with others through remote repositories

#### Skills you'll gain

Using Git   Version Control Systems   Interacting with GitHub   Reverting Changes   Creating Pull Requests

### Troubleshooting and Debugging Techniques

Course 4 • 16 hours • 4.6★ (2,634 ratings)

Course details

#### What you'll learn

- ✓ Analyze real-world IT problems and implement the appropriate strategies to solve those problems
- ✓ Demonstrate techniques to quickly find and solve the root cause of problems in IT infrastructure
- ✓ Understand the root cause for problems related to speed, crashes, or exhausted resources in your computer
- ✓ Identify the most common pitfalls of your code and how to fix them

#### Skills you'll gain

Improving Software Performance   Managing Scarce Resources   Advanced Troubleshooting   Understanding Errors   Finding the Root Cause of a Problem

### Configuration Management and the Cloud

Course 5 • 14 hours • 4.8★ (2,270 ratings)

Course details

#### What you'll learn

- ✓ Understand the benefits of configuration management and infrastructure as code
- ✓ Manage a fleet of computers using Puppet
- ✓ Automatically deploy new virtual machines running in the Cloud
- ✓ Deploy changes in a safe manner

#### Skills you'll gain

Automation at Scale   Configuration Management   Basic Monitoring & Alerting   Cloud Computing   Using Puppet

### Automating Real-World Tasks with Python

Course 6 • 17 hours • 4.8★ (2,175 ratings)

Course details


#### What you'll learn

- ✓ Use Python external libraries to create and modify documents, images, and messages
- ✓ Understand and use Application Programming Interfaces (APIs) to interact with web services
- ✓ Understand and use data serialization to send messages between running programs
- ✓ Build a solution using the skills you have learned

Skills you'll gain

- Serialization
- Building a Solution
- Creating and Translating Media Files
- Interacting with Web Services

Instructor



Top Instructor

**Google Career Certificates**  
Google  
265 Courses • 6,455,652 learners

Offered by



Google

Learn more

