

# Python 3 Programming Specialization

Become a Fluent Python Programmer. Learn the fundamentals and become an independent programmer.

## What you'll learn:

- Learn Python 3 basics, from the basics to more advanced concepts like lists and functions.
- Practice and become skilled at solving problems and fixing errors in your code.
- Gain the ability to write programs that fetch data from internet APIs and extract useful information.

## Description:

This specialization teaches the fundamentals of programming in Python 3. We will begin at the beginning, with variables, conditionals, and loops, and get to some intermediate material like keyword parameters, list comprehensions, lambda expressions, and class inheritance.

You will have lots of opportunities to practice. You will also learn ways to reason about program execution, so that it is no longer mysterious and you are able to debug programs when they don't work.

By the end of the specialization, you'll be writing programs that query Internet APIs for data and extract useful information from them. And you'll be able to learn to use new modules and APIs on your own by reading the documentation. That will give you a great launch toward being an independent Python programmer.

But it is also appropriate as a first set of courses in Python if you are already familiar with some other programming language, or if you are up for the challenge of diving in head-first.

By the end of the second course, you will create a simple sentiment analyzer that counts the number of positive and negative words in tweets. In the third course, you will mash up two APIs to create a movie recommender.

The final course named "Python Project: pillow, tesseract, and opencv (Course 5)", is an extended project in which you'll perform optical character recognition (OCR) and object detection in images.

## Courses:

- Python Basics
- Python Functions, Files, and Dictionaries
- Data Collection and Processing with Python
- Python Classes and Inheritance
- Python Project: pillow, tesseract, and opencv