

# Python Programming Bootcamp

Learn to code in this beginner Python programming course. This hands-on course is designed to give you a comprehensive understanding of Python programming fundamentals and get you coding on your own. You'll learn how to professionally structure your programs and solve real-world challenges using Object-Oriented Programming.

Group classes in NYC and onsite training is available for this course. For more information, email [corporate@nobledesktop.com](mailto:corporate@nobledesktop.com) or visit: <https://training-nyc.com/courses/python-programming-immersive>



[nyc@careercenters.com](mailto:nyc@careercenters.com) • (212) 658-1918

## Course Outline

### Python software environment

- Terminal commands
- Jupyter Notebook
- Variables
- Built-in functions in Python
- Data types: strings, integers, floats, lists
- Definite loops: For loops
- Practical Exercises

### Logical programming

- Creating functions in Python
- The behavior of data structures
- Data types: tuples
- If, Elif, Else statements
- Indefinite loops: While loops
- Indexing and slicing
- Practical Exercises

### Python built in programming

- Data types: dictionaries
- Reading from a text file
- Writing to a text file
- Appending to a text file
- Analyzing a text file's content
- Practical Exercises

## **Computer science fundamentals**

- Big-O notation
- Binary search
- Bubble Sort
- Insertion sort
- How to write efficient code
- Practical Exercises

## **Application development - Project based assessment**

- Review and Q&A
- Intro to Object Oriented Programming
- Working on a project
- Git and GitHub