Python Programming For Beginners

Learn how to program with Python, we will take you to the introduction of data science and machine learning. At the end of the program, you will be able to understand the core concept of python and how to use in building apps and networks.

Requirement

- Be Able To Use PC At A Beginner Level, Including Being Able To Install Programs
- Prior Knowledge Of English language and good listening
- A Desire To Python Programming

Prerequisite

This program requires no prerequisite courses. It's designed for beginners learning from scratch. Our goal is to help you go from 0 to 100 and learn enough to learn more.

How do you teach?

We teach in real time online 1-on-1 using Google Meet, Skype or Zoom. You can ask any questions any time, and you will get them answered. Our tutors are ready to mentor you.

Do I get a certificate?

Yes. We will provide you a Course Certificate on the condition that you complete and submit all projects and assignments by the end of the course. The certificate is not academic, it is a profesional training certificate.

Do I need equipments?

Yes. You need your own computer. Windows, Mac and Linux operating systems are all supported by the curriculum. You also need to have a stable internet connection.

Do you accept beginners?

Yes. The program is from zero to hero, so all knowlege will be covered. No much experiance required to join this course.

What is Python?

Python is a popular programming language. It was created by Guido van Rossum, and released in 1991.
It is used for:

- web development (server-side),
- software development,
- mathematics,
- system scripting.

What can Python do?

- Python can be used on a server to create web applications.
- Python can be used alongside software to create workflows.
- Python can connect to database systems. It can also read and modify files.
- Python can be used to handle big data and perform complex mathematics.
- Python can be used for rapid prototyping, or for production-ready software development.

Why Python?

- Python works on different platforms (Windows, Mac, Linux, Raspberry Pi, etc).
- Python has a simple syntax similar to the English language.
- Python has a syntax that allows developers to write programs with fewer lines than some other programming languages.
- Python runs on an interpreter system, meaning that code can be executed as soon as it is written. This means that prototyping can be very quick.
- Python can be treated procedurally, an object-orientated way or a functional way.

What you'll learn?

1. Install Python Python Environments
2. Fundamentals of Python
3. Learn how to program core python
4. Learn how to use Muddles and packages
5. Learn how to use Create Muddles and packages
6. Programming Logic and Techniq
7. Learn complete Files Handling
8. Learn Exception Handling
9. Learn how to build basic GUI application
10. Database Programming with MongoDB, SQL, and Oracle
11. Python Data with Numpy, Pandas
12. Modules Development and release
13. Algorithms Development
14. Complex Python Data analysis
15. Machine Learning & Statistical Data Analysis
16. Machine Learning Models

17. Basic Data Science
18. Understanding Neural Networks
19. Build Basic Neural Networks
20. Build Deep Learning Algorithms

Course Content

1: Introduction To Python

- Installation and Working with Python
- Understanding Python variables
- Python basic Operators
- Understanding python blocks

2: Python Data Types

- Declaring and using Numeric data types: int, float, complex
- Using string data type and string operations
- Defining list and list slicing
- Use of Tuple data type

3: Python Program Flow Control

- Conditional blocks using if, else and elif
- Simple for loops in python
- For loop using ranges, string, list and dictionaries
- Use of while loops in python
- Loop manipulation using pass, continue, break and else
- Programming using Python conditional and loops block

4: Python Functions, Modules And Packages

- Organizing python codes using functions
- Organizing python projects into modules
- Importing own module as well as external modules
- Understanding Packages
- Powerful Lamda function in python
- Programming using functions, modules and external packages

5: Python String, List And Dictionary Manipulations

- Building blocks of python programs
- Understanding string in build methods
- List manipulation using in build methods

- Dictionary manipulation
- Programming using string, list and dictionary in build functions

6: Python File Operation

- Reading config files in python
- Writing log files in python
- Understanding read functions, read(), readline() and readlines()
- Understanding write functions, write() and writelines()
- Manipulating file pointer using seek
- Programming using file operations

7: Python Object Oriented Programming – Oops

- Concept of class, object and instances
- Constructor, class attributes and destructors
- Real time use of class in live projects
- Inheritance , overlapping and overloading operators
- Adding and retrieving dynamic attributes of classes
- Programming using Oops support

8: Python Regular Expression

- Powerful pattern matching and searching
- Power of pattern searching using regex in python
- Real time parsing of networking or system data using regex
- Password, email, url validation using regular expression
- Pattern finding programs using regular expression

9: Python Exception Handling

- Avoiding code break using exception handling
- Safe guarding file operation using exception handling
- Handling and helping developer with error code
- Programming using Exception handling

10: Python Database Interaction

- SQL Database connection using python
- Creating and searching tables
- Reading and storing config information on the database
- Programming using database connections

11: Python Multithreading

- Understanding threads
- Forking threads

- Synchronizing the threads
- Programming using multithreading

12: Contacting User Through Emails Using Python

- Installing the smtp python module
- Sending email
- Reading a file and sending emails for marketing

13: Python CGI Introduction

- Writing python program for CGI applications
- Creating menus and accessing files
- Server client program

14: Introduction to Data Science

- Fundamentals of Data Science
- Data Structure
- SQL
- Prediction
- Analysis

15: Automation

- Aut Script
- Task Analysis
- Task Resolver
- Task Service
- Broadcaster