

# Python Course Content by W3training School

## Basic Python training details

### Introduction to Python Programming

- Why do we need Python?
- Program structure in Python

### Execution steps

- Interactive Shell
- Executable or script files.
- User Interface or IDE

### Memory management and Garbage collections

- Object creation and deletion
- Object properties

### Data Types and Operations

- Numbers
- Strings
- List
- Tuple
- Dictionary
- Other Core Types

### Statements and Syntax in Python

- Assignments, Expressions and prints
- If tests and Syntax Rules
- While and For Loops
- Iterations and Comprehensions

### File Operations

- Opening a file
- Using Files
- Other File tools

### Functions in Python

- Function definition and call
- Function Scope
- Arguments
- Function Objects
- Anonymous Functions

### Modules and Packages

- Module Creations and Usage

- Module Search Path
- Module Vs. Script
- Package Creation and Importing

### **Classes in Python**

- Classes and instances
- Classes method calls
- Inheritance and Compositions
- Static and Class Methods
- Bound and Unbound Methods
- Operator Overloading
- Polymorphism

### **Exception Handling in Python Programming**

- Default Exception Handler
- Catching Exceptions
- Raise an exception
- User defined exception

### **Advanced Python Concepts**

- Decorators
- Generators
- Iterators
- Co-routines

### **Standard Library Modules**

#### **Exercises**

#### **Roadmap with Python**

## **Advanced Python training details**

### **MODULE1**

Command Line arguments

Display Hooks

Standard data streams and Redirections

Os module

Sub-process module

Forking processes

Exec functions

Working with comprehensions

Working with Descriptors, Iterators, Generators and Decorators

The yield statement  
range and x-range  
Working with Context Managers  
Wrapping Objects  
Callback functions  
Duck Typing, Monkey Patching in Python  
Encapsulating Object Creation: Factory

## **MODULE 2**

Introduction to Threads in python  
thread module  
threading module  
Introduction to Pipes in python  
anonymous pipes  
named pipes, fifos  
Introduction to Recursion  
Recursive functions in Python  
Depth of Recursion

## **MODULE 3**

CGI Programming  
Introduction to WSGI  
Introduction to PEP3333  
Bottle Framework  
Flask Framework  
WebTest Framework  
Create a basic Web Service in python  
Working with Databases  
Connecting with Cassandra DB, SQLite3, MySQL  
Database Operations

## **MODULE 4**

Network Programming  
Working with XML Files  
Developing GUIs  
Working with SMTP  
Integrating Python with other Languages

# WHY CHOOSE W3TRAINING SCHOOL FOR PYTHON TRAINING IN GURGAON

We at W3training School provide training and projects on python. We make sure you gain higher programming logic and coding skills during python training program. Our python training course is designed as per latest updates and industry requirements. The course syllabus is based on industry requirement basis so that it will help you to take your programming skills and knowledge to next level.

- 10+ year of experiences professionals as trainer
- Learn python from basic to advance level.
- Project and Case study
- Industry relevant python project works.
- Job oriented course content
- Job assistance for fresher students.
- Personal level training attention and project monitoring
- Backup classes and flexible batch timings.
- Small training batches for interactive training.

## UTILIZATION OF PYTHON PROGRAMMING

- **Python for System Engineers** –Python programming plays important role in system admin thus learning python is must for programming language for system engineers. System administration job is challenging and need powerful scripting to make their task easier. Python programming and function helps to manage and monitor running process and provides updates, stats, configure and troubleshoot issue.
- **Python for Database programmers** –Python programming is so useful for Database programmers. Python is cool programming language and helps to minimize error and brings efficiency in creating database, fetching data or manipulating data in Dtabase.
- **Python and Django MVC training for developers** –Django is MVC based high lever framework of Python programming language. It is a very popular framework used to develop portals and social networking websites. Python training will help you to develop complex and simple websites using django framework.
- **Python for Mobile testing** –If you are involved in any device testing profile getting python training is must to add efficiency to your work. Python training will teach you to write test case script and test automation to add productivity in your testing profile.
- **Python for test automation professional** –Python training is extremely useful for test automation professionals. It is one of the most popular scripting languages for writing test cases script and building test automation framework.

