

Python Syllabus

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
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

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 database

Programming using database connections

11: Python Multithreading

Understanding threads

Synchronizing the threads

Programming using multithreading

12: Sample Project