



## Python Course Curriculum.

### 1. Python – Overview

- A brief history of python
- Application and trends in python
- Available python versions

### 2. Python – Environment Setup

- Getting and installing python
- Environmental variables and idle
- Executing python from command line

### 3. Fundamentals

- I/o
- Naming conventions
- Data types:
  - Numbers
  - String
  - List
  - Tuple
  - Dictionary
  - Set

### 4. Python Operators

- List, Tuple, Dictionary, Set Methods

### 5. Statements:

- If, elif, Break, Continue



## 6. Loops:

- For loop, while loop

## 7. Functions

## 8. Python Operators

## 9. List, Tuple, Dictionary, Set Methods

## 10. Statements: If, elif, Break, Continue

## 11. Loops: For Loop, While Loop

## 12. Functions

## 13. OOps Concepts:

- Class and objects
- Getters and setters
- Properties
- Inheritance
- Polymorphism

## 14. Special Functions of Python:

- Lambda, Map, Reduce, Filter

## 15. Modules in Python:

- Math
- Arrow
- Geopy
- Beautiful soup
- Numpy
- Sys



- Os

## 16. Multithreading:

- Introducing threads and life cycles
- Priorities
- Dead Locks

## 17. Exceptional Handling

- Errors
- Runtime errors
- Exceptional model
- Exceptional hierarchy
- Handling multiple exception
- Raise exceptions

## 18. File Handling

- Text files
- Csv files

## 19. Regular Expressions

- Simple character matches
- Flags, quantifiers, greedy matches
- Grouping and matching objects
- Matching at beginning or end
- Substituting and splitting a string
- Compiling regular expressions

## 20. Generators

## 21. Iterators



## 22. Decorators

## 23. Closures

## 24. Gui Interfacing: Tkinter

- Widgets
- Integrated application
- Mysql/with application
- Converting .exe