

Python Syllabus

Core Python

Introduction

- **✓** History
- **✓** Features
- ✓ Setting up path
- ✓ Working with Python
- ✓ Basic Syntax
- ✓ Variable and Data Types
- **✓** Operator

Conditional Statements

- **√**If
- ✓ If- else
- ✓ Nested if-else

Looping

- **√** For
- **√** While
- ✓ Nested loops

Control Statements

- **✓** Break
- **✓** Continue
- **✓** Pass

String Manipulation

- ✓ Accessing Strings
- ✓ Basic Operations
- ✓ String slices
- ✓ Function and Methods

Lists



- **✓** Introduction
- ✓ Accessing list
- **✓** Operations
- ✓ Working with lists
- ✓ Function and Methods

Tuple

- ✓ Introduction
- ✓ Accessing tuples
- **✓** Operations
- **√** Working
- ✓ Functions and Methods

Dictionaries

- ✓ Introduction
- ✓ Accessing values in dictionaries
- ✓ Working with dictionaries
- **✓** Properties
- √ Functions

Functions

- ✓ Defining a function
- ✓ Calling a function
- ✓ Types of functions
- ✓ Function Arguments
- ✓ Anonymous functions
- ✓ Global and local variables

Modules

- ✓ Importing module
- ✓ Math module
- ✓ Random module
- **✓** Packages
- **✓** Composition

Input-Output

- ✓ Printing on screen
- ✓ Reading data from keyboard



- ✓ Opening and closing file
- ✓ Reading and writing files
- **✓** Functions

Exception Handling

- **✓** Exception
- ✓ Exception Handling
- ✓ Except clause
- ✓ Try? finally clause
- ✓ User Defined Exceptions

Advance Python

OOPs concept

- ✓ Class and object
- **✓** Attributes
- ✓ Inheritance
- **✓** Overloading
- ✓ Overriding
- ✓ Data hiding

Regular expressions

- ✓ Match function
- ✓ Search function
- ✓ Matching VS Searching
- ✓ Modifiers
- **✓** Patterns

CGI

- ✓ Introduction
- **✓** Architecture
- ✓ CGI environment variable
- ✓ GET and POST methods
- **✓** Cookies
- ✓ File upload

Database



- **✓** Introduction
- **✓** Connections
- ✓ Executing queries
 ✓ Transactions
- ✓ Handling error

Networking

- ✓ Socket
- ✓ Socket Module
- **✓** Methods
- ✓ Client and server
- ✓ Internet modules

Multithreading

- √ Thread
- ✓ Starting a thread
- ✓ Threading module
- ✓ Synchronizing threads
 ✓ Multithreaded Priority Queue

GUI Programming

- ✓ Introduction
- ✓ Tkinter programming ✓ Tkinter widgets

Sending email