

## 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*