Python: Beginner’s Course

**Introduction to Python**

* **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
* Functions 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**

* Creating a function
* Types of functions
* Function Arguments
* Anonymous functions
* Global and Local Variables

**Modules**

* Importing modules
* 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

**OOPs Concept**

* Class and Object
* Attributes
* Inheritance
* Overloading
* Overriding
* Data Hiding

**Regular Expressions (XLRD)**

* Match Function
* Search Function
* Matching vs. Searching
* Modifiers
* Patterns

**CGI (Common Gateway Interference)**

* Introduction
* Architecture
* CGI environment variable
* GET and POST methods
* Cookies
* File Upload

**Database (MySQL)**

* Introduction
* Connections
* Executing queries
* Transactions
* Handling Error
* Database Connectivity

**Networking (SMTP)**

* 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