

## Python Beginner Curriculum

### 1. Introduction to Python

- What is Python and its uses
- Setting up Python environment
- Running your first Python script

### 2. Basics of Python

- Variables and Data Types
- Basic Input/Output
- Operators (Arithmetic, Comparison, Logical)

### 3. Control Flow

- Conditional Statements (if, elif, else)
- Loops (for, while)
- Break and Continue statements

### 4. Functions

- Defining Functions
- Parameters and Return Values
- Scope of Variables

### 5. Data Structures

- Lists and Tuples
- Dictionaries and Sets
- String Manipulation

### 6. Modules and Packages

- Importing Modules
- Creating and Using Packages
- Popular Standard Library Modules

### 7. File Handling

- Reading and Writing Files
- Working with File Paths

## 8. Error Handling

- Exceptions
- Try, Except, Finally

## 9. Introduction to Object-Oriented Programming

- Classes and Objects
- Attributes and Methods
- Inheritance and Polymorphism

## 10. Mini Projects

- Simple Calculator
- To-Do List App
- Basic Web Scraper

Recommended Duration: 8-10 weeks