Course Title: Python Programming Essentials

Course Objective

- Understand Python's syntax, semantics, best practices, and the process of setting up the programming environment.
- Learn essential programming concepts in control flow, data structure, functions, and object-oriented programming to design reusable and effective coding practices.
- Develop hands-on experience with file handling, database connectivity, and GUI design to build functional and interactive applications.
- Build a strong foundation for advanced learning or a career in software development, data analysis, and related fields.

Course Outline

Chapter 1 Introduction to Python

1.1 Overview of Python

1.2 Setting up the Python Environment

1.3 Writing and executing your first python program

1.4 Python Syntax, Comments and Best Practices

Chapter 2 Python Basic

2.1 Variables and Data Types

2.2 Basic Input and Output Operations

2.3 Operators

Chapter 3 Control Flow

3.1 Conditional Statements

3.2 Loops

3.3 Break, Continue, and Pass Statements