Core Python Programming Syllabus

Module 1	2 Hours - 2 Topics

- **Introducing Python (Day 1)**
- **Installing Python on Windows (Day 1)**

Module 2	2 Hours - 1 Topic

- **Installing Python on Linux and other Operating Systems (Day 2)**

Module 3	2 Hours - 2 Topics

- **Using quotes and escape character (Day 3)**
- **String Concatenation and Repeater Operators (Day 3)**

Module 4	2 Hours - 1 Topic

- **Using Mathematical Operators with Numbers (Day 4)**

Module 5	2 Hours - 3 Topics

- **Creating and Using Lists (Day 5)**
- **len() with Lists (Day 5)**
- **in Operator with Lists (Day 5)**

Module 6	2 Hours - 2 Topics

- **Deleting List Element (Day 6)**
- **Common list and operations (Day 6)**

Module 7	2 Hours - 2 Topics

- **Using Dictionaries (Day 7)**
- **Accessing Dictionary values (Day 7)**

Module 8	2 Hours - 2 Topics

- **Adding, Replacing and Deleting key-value pairs (Day 8)**
- **Functions: get(), keys(), values() and items() (Day 8)**

Module 9	2 Hours - 1 Topic

- **Using for Loops (Day 9)**

Module 10	2 Hours - 3 Topics

- **Using Sequence Operators and Functions with Strings (Day 10)**
- **Using the in Operator (Day 10)**
- **Indexing and Slicing Strings (Day 10)**

Module 11	2 Hours - 4 Topics

- **Defining Functions (Day 11)**

- **Using Parameters and Return Values (Day 11)**
- **Using Arguments and Defaults Parameters (Day 11)**
- **Using Global Variables and Constants (Day 11)**

Module 12	2 Hours - 3 Topics

- **Introduction to Object-Oriented Python (Day 12)**
- **Creating Classes, Methods and Objects (Day 12)**
- **Using Constructor and Attributes (Day 12)**

Module 13	2 Hours - 3 Topics

- **Using Class Attributes and Static Methods (Day 13)**
- **Understanding Object Encapsulation (Day 13)**
- **Private Attributes and Methods (Day 13)**

Module 14	2 Hours - 3 Topics

- **Controlling Attribute Access (Day 14)**
- **Inheritance (Day 14)**
- **Polymorphism (Day 14)**

Module 15	2 Hours - 4 Topics

- **The open Function (Day 15)**
- **Input from Text Files (Day 15)**
- **Output to Text Files (Day 15)**
- **Handling Exceptions (Day 15)**

Module 16	2 Hours - 2 Topics

- **Using Modules in Programs (Day 16)**
- **Writing Modules (Day 16)**

Module 17	2 Hours - 1 Topic

- **Importing Modules (Day 17)**

Module 18	2 Hours - 1 Topic

- **Functions: Recurssive function (Day 18)**

Module 19	2 Hours - 1 Topic

- **Lambda Function (filter(), map()) (Day 19)**

Module 20	2 Hours - 1 Topic

- **EXAM (Day 20)**