



# A.D.COMPUTER TRAINING CENTER

An ISO 9001:2015 Certified Organization

Enrolled With Ministry of Micro, Small, and Medium Enterprises (MSME)

Reg. Address: 58, Anjagarh, Birati, Kolkata - 700051 (Nilachal Bazar),  
Holding No: 105(136), North Dum Dum Municipality, Dist: 24 Pgs(N), W.B  
Mobile : 9674060206 / 7903326708 | Website: [www.adctcindia.com](http://www.adctcindia.com)



## Python Programming Syllabus

### Module 1: Introduction to Python

- Features of Python
- Execution of Python Programs
- Viewing the Byte Code
- Python Virtual Machine
- Memory Management in Python
- Comparison between C, Java, and Python

### Module 2: Python Fundamentals

- Character Set and Tokens (Keywords, Identifiers, Literals, Operators, Punctuations)
- Comments in Python (Single-line and Multi-line)
- Variables and Assignments (Creating Variables, Multiple Assignments)
- Module 3: Control Structures
- Decision Making: if, if-else, nested if-else
- Looping: while, for loops
- Break and Continue Statements

### Module 4: Functions and Modules

- Defining and Calling Functions
- Function Arguments and Return Values
- Lambda Functions
- Modules and Packages

### Module 5: Data Structures in Python

- Lists, Tuples, Sets, and Dictionaries
- Operations on Data Structures
- List Comprehensions

### Module 6: File Handling

- Opening and Closing Files
- Reading and Writing Files
- File Methods and Operations

## **Module 7: Exception Handling**

- Errors and Exceptions
- Try, Except, Finally Blocks
- Raising Exceptions

## **Module 8: Object-Oriented Programming in Python**

- Classes and Objects
- Constructors and Destructors
- Inheritance and Polymorphism
- Method Overriding

