# SLC (University of Delhi)
# Centre for Skill Development

## SHORT TERM /ADD ON COURSES

# Certificate course in Programming through Python

## About the Course:

It was started by the Centre for Skill Development (CSD) in the year 2023-24 in collaboration with the National Institute of Electronics & Information Technology (NIELIT), an Autonomous Scientific Society under the administrative control of the Ministry of Electronics & Information Technology (MoE&IT), Government of India.

## Eligibility Criteria:

1. Minimum eligibility is 10+2 (from any stream or subjects) with 45% aggregate.

   Or

2. Graduates from any recognized universities are also eligible.

## Course Details:

1. 2 Months (2 hours Class to be held thrice a week).

2. National Institute of Electronics & Information Technology (NIELIT) (An Autonomous Scientific Society under the administrative control of Ministry of Electronics & Information Technology (MoE&IT), Government of India).

3. Minimum number of students in each batch of course: 20

   Maximum number of students in each batch of course: 50

## Important Dates:

Registration begins in the last week of May every year.

Commencement of course: September/October.

## Registration details:

The non-refundable registration fee of INR 100/- is to be made at

A/c Name: SHYAM LAL COLLEGE MISCELLANEOUS A/C
A/c No. : 1247800135
IFSC Code:  CBIN0283941
MICR Code:  110016147
Bank: Central Bank of India

## Documents required at the time of registration:

1. Copy of class 12<sup>th</sup> mark sheet or Graduation Degree/Mark sheet.

2. Screenshot of payment of registration fee of INR 100/-.

## Link to register:  http://bit.ly/Add-oncourses23

## Fee Structure:

INR 4000/- (including GST) for 2 months.

## Guidelines:

1. Admission is on a First come First Serve Basis for the students meeting the eligibility criteria.
2. Online Registration Forms and details are available on the college website.
3. One-time registration fee of INR100/- is payable for Registration (non-refundable).
4. Students may enroll in two short-term courses at the same time, as well as any one Certificate/Diploma/Advanced Diploma course in addition to one short-term course.
5. Students who are willing to do more than one course must fill out a separate form for each course opted (**registration fee needs to be paid only once).**
6. For any query Email us at csd@shyamlal.du.ac.in
7. Classes for the courses will be conducted in physical mode at Shyam Lal College, from 2:00 PM onwards.
8. An amount of INR1000/- will be deducted if admission is cancelled. No refund will be allowed after July 31, 2024.

*Note: Commencement of a course is subject to admission of minimum number of students.*

*After registration, candidates shortlisted for admission will be notified of further admission details on their registered email addresses through the official CSD email address: csd@shyamlal.du.ac.in within 15 days of submitting online registration form.*

# Course Curriculum

## Certificate course in  Programming through Python

**Duration (In Hours)**: 40 Hours (@ 2 hours Daily)

**Course contents**

### Unit 1: Introduction to Python Programming

- Introduction to problem-solving and Algorithms
- Introduction to Python and its features
- Installing Python and setting up the development environment
- Basic Python syntax and data types
- Writing and executing Python scripts
- Using variables, operators, and expressions
- Basic input and output in Python

## Module 2: Control Flow and Loops

- Introducing Conditional statements (if, else, elif) with practical examples
- Loops (while, for) and iteration
- Understanding control flow and program execution
- Solving simple problems using control flow and loops

## Module 3: Data Structures in Python

- Lists, tuples, and sets
- Working with dictionaries
- Understanding data structures and their use cases
- Manipulating and accessing elements in data structures
- Applying data structures to solve real-world scenarios

## Module 4: Functions and Modules

- Writing and using functions in Python
- Parameters, return values, and scope
- Understanding modules and libraries
- Using built-in and external modules to enhance functionality
- Implementing functions in problem-solving