Skill Course Details

Course Name: Python Programming Basics

About the course

This course aims to provide participants with the essential skills needed to excel in the field of programming. The structured curriculum, hands-on projects, and comprehensive resources will ensure that students gain practical knowledge and are well-prepared for professional opportunities.

The course is designed to equip students with essential programming skills in Python, preparing them for careers in software development, data analysis, and other related fields. It aims to achieve the following objectivs:

- To provide comprehensive training in Python programming.
- To equip students with practical skills through handson projects and exercises.
- To prepare students for professional opportunities requiring Python expertise.

Mode of Conduct: Offline Classes on weekdays at Centre for Innovative Skill-Based Courses (CISBC), Open Learning Development Centre, 2nd Floor, ARC Building, Opp. Khalsa College, University of Delhi, Delhi-110007.

Duration: 3 months

Fees: Rs. 5000/-

Eligibility: 12th pass from any stream

Job Prospects/ Future Opportunities

This course will enable learners to apply programming skills in Data Analysis, Python Full Stack web development, automating tasks using python programming.

Schedule Of Classes: Two classes per week (2 hours each) on Weekdays.

No. of Seats: 30

Assesment:

- Weekly assignments and quizzes
- Final project evaluation

Time Table:

Days of Week	Class Timing	Location
Tuesday	2:00 P.M. to 04:00 P.M	OLDC, Second Floor,
Thursday	02:00 P.M. to 04:00 P.M	ARC Building, University of Delhi, Opposite S.G.T.B. Khalsa College, Delhi- 110007
Commencement of Classes	2 nd September 2024	

Structure of Lesson plan

S.No.	Week	Module	Topic
1	1	Introduction to Python	Overview of Python and its applications, Installation and setup, Basic syntax and operations, Data types and variables, Input and output.
2	2-3	Control Structures and Functions	Conditional statements (if, elif, else), Loops (for, while), Break and continue statements, Defining and calling functions, Function arguments and return values, Lambda functions
3	4-5	Data Structures	List, tuples, dictionary, set :Creating and accessing data structure, comprehensions, Common operations
4	6-7	ObjectOriented Programming (OOP)	Classes and objects, Attributes and methods, Inheritance and polymorphism, Encapsulation and abstraction
5	8-9	Advanced OOP and File Handling	Magic methods, Static and class methods, Exception handling in OOP, Reading from and writing to files, Working with CSV and JSON files, Exception handling in file operations.
6	10-11	Modules, Packages, and Working with APIs	Importing modules Creating custom modules and packages Using standard libraries
7	12	Revision & Evaluation	Revision, Final Practical based Evaluation.