Certified Professional Training

Python for Everyone

Practical Training on Real World Industrial Projects

Target Learners: Undergraduates and Job Professionals

Pre-requisite: Basic computer technological skills

Duration: 2 Months (2 sessions each week = Total 16 sessions)

Credit Hours: 32 (4 Hours each week)

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Enrollment Form: https://forms.gle/wHUTGTGtAAba5AjN6

Key Takeaways

During this course, student will be able to learn:

- Data Types
- Core programming concepts
- Conditions, Loops & Functions
- Object Oriented Programming
- GUI development
- File Handling.
- Graph Plottings

Approved by

ViLabs Academy, Advisory Board Members (ABM) comprises senior educators, industry leaders, and global technology experts who provide strategic guidance across training design and curriculum development. The Board actively reviews course content, ensures alignment

with current industry demands, and validates learning outcomes against global skill standards. Their involvement guarantees that all ViLabs Academy programs remain credible, practical, and workforce-ready, giving learners and partners confidence in the quality and relevance of our education.

Software/Tools to be learn

- Google Colab
- Jupyter Nodebook

Course Outline

Introduction

- Introduction to Programming Language
- Python and its advantages
- Scope of Python and leads to AI journey

Variables

- What are Variables
- Data Types
- String, Float, Integer
- List, Tuples and Sets

Arithmetic Operations

- All arithmetic operators
- Working with operators

Conditions

- Input Statement
- Conditional Operators
- Conditions Statements (if and else)
- Elif and multiple conditions
- Logical operators
- Nested Conditions

Loops

- For Loop
- While Loop
- Loops with conditions
- Break and continue statements

Object Oriented Programming

- Functions
- Classes and Objects
- Methods and Attributes
- Inheritance & Polymorphism
- File Handling with OOPs
- Management Systems

Libraries:

- Working with Libraries
- Numpy Arrays
- Pandas and Dataframes
- Working with CSV Files
- Matplotlib Graph Plottings
- Creating GUI (Tkinter Library)

Projects

1. Personal Chatbot
2. Number Of Words and Sentence Counter
3. Area of N-Sided Polygons Calculator
4. Guessing game
5. Rock, Paper, Scissor game
6. Mathematical Calculator
7. Pet Management System
8. Student/ Employee Management System
9. Hospital Management System
10. GUI based Calculator using Tkinter
11. Namaz clock Application/ Registration Page Application
12. Visuals on Temperature of London