ST. ALOYSIUS COLLEGE (AUTONOMOUS)
MANGALURU-575003

In Collaboration with

Tech Growth Learning Academy

Dept. of Computer Science, Application & Animation,
Dept. of Post Graduate & Research in Mathematics,
Tech Growth Learning Academy,
SAC Developers Club.

ANYBODY CAN CODE

Are you ready to embark on an exciting voyage into the World of Python programming?
Whether you're from non-computer background or someone looking to enhance their coding skills, our comprehensive course is tailored to take you from a Noob to a programming maestro!

Learn Python from Scratch
A Practical Guide for
Non-Computer Science Students

Enroll now and let the coding magic begin.

Course Duration: 30Hrs

No Prerequisites Required

Fees: ₹2000/-

Course Title: Anybody Can Code: Python Programming Certificate Course
Duration: 30 Hours
Mode of Delivery: Online/Offline/Blended
Target Audience: Beginners with no prior programming experience
Course Objectives:

To introduce basic programming concepts using Python.
To enable participants to write simple and efficient Python programs.
To familiarize participants with problem-solving techniques using Python.
To provide hands-on practice with real-world coding projects.

Syllabus Breakdown (30 Hours)

Module 1: Introduction to Python Programming (6 hours)
Session 1 (2 hours):
Overview of Python
Installing Python and setting up the environment
Writing your first Python program
Session 2 (2 hours):
Understanding variables and data types
Input and output operations
Comments and basic debugging
Session 3 (2 hours):
Arithmetic and logical operations
Typecasting and working with strings

Module 2: Control Structures (6 hours)
Session 4 (2 hours):
Conditional statements: if, else, elif
Introduction to Boolean logic
Session 5 (2 hours):
Looping structures: for and while loops
Break, continue, and pass statements
Session 6 (2 hours):
Writing programs with decision-making and loops

Module 3: Data Structures in Python (6 hours)
Session 7 (2 hours):
Lists: Creation, indexing, slicing, and basic operations
Session 8 (2 hours):

Tuples and dictionaries: Use cases and operations
Session 9 (2 hours):
Sets: Introduction and applications
Iterating through data structures

Module 4: Functions and Modules (6 hours)
Session 10 (2 hours):
Understanding functions: Definition, parameters, and return values
Writing reusable functions
Session 11 (2 hours):
Using built-in modules and libraries
Importing and managing external modules
Session 12 (2 hours):
Writing modular code
Debugging and exception handling

Module 5: Hands-On Projects and Final Assessment (6 hours)
Session 13 (2 hours):
Project 1: Create a basic calculator
Project 2: Develop a simple text-based game
Session 14 (2 hours):
Project 3: Build a data management system using lists and dictionaries
Session 15 (2 hours):
Final assessment: Complete a guided mini-project
Q&A session and feedback
Certification Requirements:

Attend at least 80% of the sessions.
Complete all projects and assignments.
Pass the final assessment.
By the end of this course, participants will have the foundational knowledge and skills to start coding with Python confidently.