Course: **Fundamentals of Programming in Python**

Contact Hours: **24**

Pre-requisite: **Computer Literacy**

Description

This course aims to teach learners the basics of programming computers using Python. Students will learn how to construct a program from a series of simple instructions in Python. This course avoids all but the simplest mathematics and anyone with moderate computer experience should be able to master the materials in this course.

Target Audience

This course is designed for individuals that are interested in the field of Python Programming

- Students
- Programmers
- IT Professionals

Learning outcomes

On completion of this course, learners will be able to:

- Describe the basics of the Python programming language
- Install Python and write your first program
- Use variables to store, retrieve and calculate information
- Utilize core programming tools such as functions and loops

Course Content

1. Opportunities in Value Addition (home base) Course Overview. Usage of Python. Download & Install of Python, Formatted Printing, Literals & Variables

2. Formatted Printing, Variables & Calculations

3. Formatted Printing, Expressions, Statements

4. Boolean expressions, Decisions with if-else

5. Decisions with if-else and Loops (while & for)

6. Loops and Arrays (for in loops)

7. Decisions (if, if-else), Procedures & Functions

8. Decisions, Arrays, Procedures and Functions