PYTHON FOR FINANCE

Course Agenda

Course duration	36 hours
Class duration	4.5 hours (including 30 minutes lunch break)
Delivery mode	Classroom instructor-led
Number of classes	8
Time of class	10 am – 2:30 pm
Trainer	Mr. Hudson Mbong

MODULE 1: PYTHON ESSENTIALS I			
Day	**Main Topics**	**Sub-topics**	**Duration (hrs)**
1	Introduction to Python and Computer Programming	• Absolute basics • Compilation vs Interpretation • Why Python • Installing Python	1.5
	Data Types, Variables, Basic I/O Operations, Basic Operators	• Python Literals • Arithmetic Operators and Hierarchy of Priorities • Variables • Comments • The input ( ) function	2.5
	Total break duration		0.5
2	Boolean Values, Conditional Execution, Loops, Lists. Logical and Bitwise Operators	• Comparison Operators • Conditional Execution • Logic and Bit operations • Lists • List Processing • Multidimensional Arrays	4
	Total break duration		0.5
3	Functions, Tuples, Dictionaries, and Data Processing	• Functions • Function Parameters and Argument Passing • Returning Results from Functions • Functions and Scopes • Creating Simple Functions • Tuples and Dictionaries	4
	Total break duration		0.5

MODULE 2: PYTHON ESSENTIALS II

4	Modules, Packages and PIP	• Importing and using Python modules; using some of the most useful Python standard library modules • Constructing and using Python packages; PIP (Python Installation Package) and how to use it to install and uninstall ready-to-use packages from PyPI.	2
	Strings, String and List Methods, Exceptions	• Characters, strings and coding standards • Strings vs. lists – similarities and differences • Lists methods • String methods • Python's way of handling runtime errors • Controlling the flow of errors using try and except • Hierarchy of exceptions.	2
	Total break duration		0.5
5	Object-Oriented Programming	• Basic concepts of object-oriented programming (OOP) • The differences between the procedural and object approaches (motivations and profits) • Classes, objects, properties, and methods • Designing reusable classes and creating objects • Inheritance and polymorphism • Exceptions as objects.	4
	Total break duration		0.5
6	Miscellaneous	• Generators, iterators and closures • Working with file-system, directory tree and files • Selected Python Standard Library modules (os, datetime, time, and calendar.)	4
	Total break duration		0.5
MODULE 3: PYTHON IN FINANCE			
7	Real life exercises for Python in Finance	• Basic file/directory automation • Build solutions to automate repetitive tasks for financial audit and share them with your finance	4

		colleagues to improve their productivity	
	Total break duration		0.5
8	Real life exercises for Python in Finance	• Basic automation of tables in Excel • Using cron jobs (Windows Schedular) to automatically run Python jobs on a regular basis • Using Pandas to extract data from PDF files	4
	Total break duration		0.5

cyberskills

Freeport Zone 5
Mer Rouge
Mauritius

info@cyberskills.mu
cyberskills.mu