

PYTHON ESSENTIALS II

Course Agenda

Course duration	20 hours
Class duration	5 hours (including 30 minutes lunch break)
Delivery mode	Classroom/online instructor-led
Number of classes	4
Time of class	10 am – 3 pm
Trainer	Mr. Hudson Mbong

Day	Main Topic	Sub Topic	Duration (hrs)
1	Modules, Packages and PIP	<ul style="list-style-type: none">• 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.	5
2	Strings, String and List Methods, Exceptions	<ul style="list-style-type: none">• 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.	5
3	Object-Oriented Programming	<ul style="list-style-type: none">• 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	5

		<ul style="list-style-type: none"> • Inheritance and polymorphism • Exceptions as objects. 	
4	Miscellaneous	<ul style="list-style-type: none"> • Generators, iterators and closures • Working with file-system, directory tree and files • Selected Python Standard Library modules (os, datetime, time, and calendar.) 	5
Total course duration (hrs)			20