No. Days	Topic	Sub Topic	COURSE	Digital Content Duration (Hrs.)	(VILT+ Practice) Duration in Hrs.
Pre- Assessment					
Day-1	**Introduction to Python**	Environment Setup, Different Applications where Python is Used, Discuss Python Scripts on UNIX/Windows, Values, Types, Variables, Operands and Expressions, Conditional Statements, Loops, Command Line Arguments, Writing to the Screen, Python Files I/O Functions, Numbers, Strings and Related Operations, Tuples and Related Operations, Lists and Related Operations, Dictionaries and Related Operations, Sets and Related Operations	**Python Programming for Beginners: Hands-on (Online Lab)** Python Programming - Comprehensive Training	20	12
Day-2	**Functions, Modules, Errors and Exceptions**	Functions, Function Parameters, Global Variables, Variable Scope and Returning Values, Lambda Functions, Standard Libraries, Modules Used in Python,The Import Statements, Module Search Path, Package Installation Ways, Errors and Exception Handling, Handling Multiple Exceptions			
Day-3	**Python Jewels**	The Zen of Python, Common idioms, Lambda functions, List comprehensions, Generator expressions, String formatting			
	Modules and Packages	Initialization, code, Namespaces, executing modules as scripts Documentation, Packages and name resolution Naming,conventions, Using imports			
	Modules	What is a Python Module?, How it is different from a Python File ? Creating modules, Importing functions from a different module Importing Variables from different modules Python built-in modules,Working on math, os, sys, time, datetime,			
Milestone Assessment 1					
Day-4	**OOPS Features in Python Classes**	Defining classes, Instance methods, Containership vs Inheritance,Inheritance,Overriding parent class methods, Usage and Importance of super() function, Understanding Types of inheritance, Single inheritance, Multiple Inheritance, Multilevel Inheritance, Polymorphism, Encapsulation, Creating and Working on Abstract classes.	**Python - Object-Oriented Programming**	4	12
Day-5	**OS**	The OS module, Environment variables, Launching external commands Walking directory trees, Paths, directories filenames Working with file systems	Python Programming - Comprehensive Training	4	
Day-6	**Regular Expression**	Defining regular expressions, Compiling regular expressions Using regular expressions, using match objects to extract a value Extracting multiple items, Replacing multiple items	**Hands-On Python Regular Expressions**		
Milestone Assessment 2					
Day-7	**Database Access**	Creating and executing a cursor, CURD operations with databases like mysql, sqllite3, oracledb , mongodb etc	The Ultimate MySQL Bootcamp: Go from SQL Beginner to Expert	6	6
	Working on Files I/O operations	Creating a new file using open(), Writing and Reading data from files, Different modes [w,x,a.r,r+,w+,rb..] **Hands-on - Reading, Writing, Appending, opening, and closing files.**	Learn Python 3 from Scratch	11	6
Day-8	**Multithreading**	o Introduction to Thread lifecycle o Thread vs Process o Starting a new thread o Threading Modules Requests module Accessing URLs with requests GET, POST using requests module	Learn Python Programming in Linux Complete Python Web Course: Build 8 Python Web Apps	31	
Milestone Assessment 3					
Day-9	**Fetching Live Data from the Web -Web Scraping using Python**	**Web Scraping-**Why WebScraping and Understanding the importance of it, Installing BeautifulSoup, Understanding web structures, Scraping data from the web using beautiful soup **Hands-On** - Scraping Static and Dynamic websites using Beautifulsoup	**Web Scraping Tutorial with Scrapy and Python for Beginners**	8	
Post Assessment					
Total Duartion in Hrs.				**84**	**36**
				120	