

Python Programming Course Planning in Blended Learning Mode

Faculty/Instructor: (Your Name)	Prof.Sonali Bodekar , Prof.Prajakta Gotarne , Prof.Poonam More
Institute (Dept/College/Institute):	Usha Mittal Institute of Technology,SNDT WU.
Programme:	B.tech
Course Topic:	Learn Python from Scratch
Intended participants' size per batch:	60
Duration:	(45 hours for learning from resources, live sessions, active participation in individual and group activities, assignments, mini projects,hands-on training etc.)

Learning Outcomes (LO):

After completing this course, participants will be able to:

- Install Python and write your first program.
- Explore basic Python building blocks, including syntax and semantics.
- Utilize core programming tools such as functions,loops, control statements,string manipulation and basic file handling.
- learn about Python modules, how to import objects from a module, and how to develop your modules.

Course Structure

(Pl keep rows as per your need... not mandatory to have 3 Modules ... may add or delete modules and sub-modules as per requirement)

		Modules and sub-topics	Hours	Weightage (%)
		Module 1:		25
1	1.1	Introduction to Python: Introduction, Features of Python, The Paradigms,Chronology and uses, Install Python Python Fundamentals: :Syntax, Variables,Datatypes, Keywords,Literals,Variables, Arrays, Strings, Numbers, Booleans, Constants, Comments, Type Conversion, Console Input/Output	2+4	
2	1.2	Conditional statements and Looping: Operators, Python If...Else, Ternary Operator,While Loops, For Loops, Break, Continue and Pass Functions: Python Functions, Default Parameters, Keyword Arguments, Recursive Functions, Lambda Expressions,Function Docstrings	5+10	
		Module 2 :		25
4	2.1	Python List, Tuple, Dictionary and Set: Sorting a List in Place: sort(), Sorting a List: sorted() Slicing a List: [::], Unpacking a List, Iterating over a List: for loop Finding Index of an Element: index(), Iterables, Transform List Elements: map(), Filtering List Elements: filter(), Reducing List Elements: reduce(), Dictionary,Set Directory: Working with Directory, Listing Files in a Directory	4+8	
5	2.2	Modules and Packages: Introduction to Python Modules, Writing Python Modules, Importing a Module, Search Sequence, Packages,Third party packages.	2+4	

		FILE I/O: Reading a Text File, Writing to a Text File, Creating a Text File, Checking If a File Exists, Reading from a CSV File, Writing to a CSV File, Renaming a File, Delete a File, Exception Handling	2+4	
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Course Plan

(1/2 credit: 15 hours including reading, viewing hours, activities)

- All activities should be described appropriately
- Write every single activity in separate rows and mention required minutes, e.g. If resource URL given, approx. reading/listening/watching time in one row.
Describe activity such as DF or Quiz based on it in the next row.
- Please mention nature of **OER** such as video/audio/infographic, etc.

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Sr. No. of Module	Number of related LO	Week/Dates	Out-of-class Mode		ICT Tool/ Platform/ LMS	In-class Mode		Duration in Min.
			Resources (Digital/Non-digital) Books/ articles/ pdf/ URL/ OER*/ CP*/ IM*)	*Activity (Field work/ project/ collaboration on DF* etc./ Creative products, etc.)		Resources (digital/non-digital resources to be provided in the class for group-work)	*Activity (CLS group-work/ instructor-led methods such as lectorettes, demo/ Concept-mapping/ Quiz/ Games, etc.)	
1.1								
1.2								