

PNS SCHOOL OF ENGINEERING & TECHNOLOGY

Lesson Plan of Summer 2025

Department : CSE	Semester : 3rd	Name of the Faculty - Er Sushree Sangita Tripathy
Subject: Programming with Python	No.of days/per week class allotted 4p/week.	Semester from : 14/07/2025 to 30/11/2025
		No. of weeks:12 weeks
		Topics to be covered:
1st week	1st	Introduction to Python & Overview of Python
	2nd	Features & Applications
	3rd	
	4th	Setting up the Python Environment (Python Installation IDEs)
2nd week	1st	Python Syntax
	2nd	Continue
	3rd	Variables & Data types
		Doubt Clearing Class
	4th	Operators Writing
3rd week	1st	Class test
	2nd	Executing & Debugging Python Scripts
	3rd	Control Structures and Functions : Conditional Statements
	4th	If , else , elif
4th week	1st	Loops : for , while and Nested Loops
	2nd	Continue
	3rd	Functions : Defining , calling
	4th	Scope of variable to Lamda Functions
5th week	1st	Continue
	2nd	Recursion
	3rd	Data Structures in Python : List , Tuples , sets and Dictionaries , Operations & Applications
	4th	Continue
6th week	1st	Doubt Clearing Class
	2nd	List Comprehesions and Dictionary Comprehesions
	3rd	Continue
	4th	Working with Strings : Methods & Manipulation
	1st	Introduction to Python collection module

7 th week	2nd	File handling and modules : File operations , Reading , Writing and appending file
	3rd	Continue
	4th	Working with CSV and JSON Files
8 th week	1st	Built-In modules (Math , OS, datetime)
	2nd	Continue
	3rd	Creating and Using Custom Modules
	4th	Doubt Clearing Class
9 th week	1st	Object-Oriented Programming (OOP) in Python
	2nd	Understanding Classes and Objects
	3rd	Concept of Encapsulation
	4th	Class test
10 th week	1st	Inheritance & Polymerphism
	2nd	Working with Magic Methods
	3rd	Operator Overloading
	4th	Exception Handling in Python
11 th week	1st	Doubt Clearing Class
	2nd	Advance Python and Applications
	3rd	Introduction to Libraries : Numpy , Pandas
	4th	Continue
12 th week	1st	ClassTest
	2nd	Mini Project : Developing a pythn Script for a Real World Problem
	3rd	Continue
	4th	Continue
	5th	Discuss Semester Questions