

St. Xavier's College (Autonomous), Ahmedabad

FACULTY OF ARTS

DEPARTMENT OF ECONOMICS (SF)

BA. Hons. (Economics) SF

SEMESTER-2

Skill Enhancement Course: Basic Python for Economics

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title & Code	Credit Distribution of The Course			Eligibility Criteria	Pre-requisite(s) of the Course (if any)
	Lectures	Tutorial	Practical / Practice		
Basic Python for Economics (ECH-2650)	0	0	2	10 + 2 from a recognized board in any stream	None

Learning Objectives (LO)

- LO-1: To introduce first-year students to Python as a simple and accessible tool for analyzing data.
- LO-2: To familiarize students with basic statistical concepts and their implementation in Python.

Course Outcomes (CO)

- CO-1: Write simple Python programs to perform basic data operations.
- CO-2: Generate and interpret basic statistical outputs using Python.

Unit 1: Getting Started with Python

1. Introduction to Python: Installation and using Google Colab or Jupyter Notebook.
2. Basics of Python: Variables, arithmetic operations, and data types.
3. Simple input/output operations.
4. Introduction to lists and dictionaries for storing data.

Unit 2: Basic Statistics with Python

1. Calculating mean, median, and mode using Python.
2. Writing basic scripts for variance and standard deviation.
3. Introduction to data visualization: Plotting bar charts and line graphs using Matplotlib.
4. Simple case study: Analyzing a small dataset (e.g., monthly expenses, exam

scores).

Suggestive Reading

1. "Python Crash Course" by Eric Matthes.
2. "Automate the Boring Stuff with Python" by Al Sweigart.
3. "Think Python" by Allen B. Downey (Chapters 1-4 for basics).
4. Python documentation and tutorials (official Python website).