St. Xavier's College (Autonomous), Ahmedabad Syllabus of Semester – II of the following departments under Faculty of Arts based on Under Graduate Curriculum Framework - 2023 to be implemented from the Academic Year 2023-24

FACULTY OF ARTS

DEPARTMENT OF ECONOMICS

| Course | Title | Content | Hours/week | Credit |
|--------|--------|------------------------------|------------|--------|
| SEC | Python | U-1: Introduction to Python, | 2hrs | 2 |
| | | Variables & Data Types | | |
| | | U-2: Coding in Python | | |

BA Economics Hons. (SF)

SEC: Python

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) | |
|---------------------|-----------------------------------|----------|-------------------------|----------------------------------------------------|----|
| | Lecture | Tutorial | Practical / Practice | | |
| Python | 2 | 0 | 0 | 10 + 2 from a recognized board in any stream | NA |

Course Objectives-

- This course is designed for beginners with little to no programming experience who wish to learn Python, a versatile and widely-used programming language.
- The course covers fundamental concepts of Python programming, including variables, data types, control structures, functions, and basic file operations.
- Prepare students with the necessary techniques for basic Data Analysis

ECH-2650: Python (SEC- Skill Enhancement Course)

Unit 1: Introduction to Python, Variables & Data Types

- What is Python?
- Python Interpreter and Interactive Mode
- Writing and Running Python Scripts
- Variables and Assignments
- Numeric Data Types: int, float, complex
- Text Data Type: str
- Boolean Data Type: bool

Unit 2: Coding in Python

- Printing Output: print() function
- Accepting User Input: input() function
- Formatting Output with f-strings and str.format()
- Conditional Statements: if, elif, else
- Comparison Operators: ==, !=, <, >, <=, >=
- Logical Operators: and, or, not
- Looping Constructs: while loop, for loop

Reference Links:

- 1. Official Python Documentation: [Python.org](https://www.python.org/doc/)
- 2. Python Tutorial on W3Schools: [Python Tutorial](https://www.w3schools.com/python/)
- 3. Python Programming Exercises on PracticePython.org: [Practice Python.org](https://www.practicepython.org/)
- 4. Python Crash Course Online Resources: [Python Crash Course Online Resources](https://ehmatthes.github.io/pcc_2e/)