III YEAR SEM-I B.Tech CSE	ELECTIVE	L	T	P	С
Code: CS4608	Programming for everybody using Python	3	1	0	4

UNIT I

Introduction - Why we program? What is python; Python as a calculator; Introduction to Python Programming; Basic Input; Variables and Expressions; Operators.

UNIT II

Strings; Control flow; Loops and Iterations; Functions;

UNIT III

Lists and Tuples; Python Dictionaries; Python Compound Statements

UNIT IV

Working with Files; File creation, File Read, File Write, File Copy; Understanding Iterators; Creating Python Functions; Creating Modules and Packages, OS Interfacing; Object Oriented Python; Fun With Objects; Overriding Inherited Methods,

UNIT V

Python Programming (Lambda Functions); Errors and Exceptions; Regular Expressions (RE Objects); Python Generators; GUI Introductions; GUI Controls Examples; Accessing the Databases Using Python –I; Working with XML Data; Serializing Objects (Pickling)

UNIT VI

Python and the Web; Working with CGI; CGI Uploading File; CGI Sending Mails; Python; Testing & Debugging, Debugging concepts with examples; Python Testing Concepts and Unit Test Examples

Text Books

- 1) John Zelle, "Python Programming: An Introduction to Computer Science", Franklin Beedle, 2nd Edition, 1985
- 2) O'Reilly, "Python in a Nutshell", Alex Martel, Second Edition.