**Module: 1: Basics of Python Programming** [14 Sessions, Knowledge]

Topics: Data types, operators and Expressions, Input and Output Statements. Control Structures – Selective and Repetitive structures

**Module: 2: Indexed and Associative Data Structures** [20 Sessions, Application] Topics: Strings, Lists, Sets, Tuples, Dictionaries

**Module: 3: Functions, Exception Handling** [6 Sessions, Application] Topics: User defined functions, exception handling

**Module: 4: Working on Libraries** [04 Sessions, Application]

Introduction to python built-in libraries, demonstrate usage of libraries.

**SKILL SETS TO BE DEVELOPED:**

Graduate of the B.Tech. Program in Computer Science and Engineering shall be able to:

1. **An attitude of enquiry.**
2. **Confidence and ability to tackle new problems.**
3. **Ability to interpret events and results**.
4. Ability to work as a leader and as a member of a team.
5. **Assess errors in systems/processes/programs/computations and eliminate them.**
6. Observe and measure physical phenomena.
7. Write reports.
8. Select suitable equipment, instrument, materials & software
9. **Locate faults in system/Processes/software.**
10. Manipulative skills for setting and handling systems/Process/ Issues
11. The ability to follow standard /Legal procedures.
12. An awareness of the Professional Ethics.
13. Need to observe safety/General precautions.
14. To judge magnitudes/Results/issues without actual measurement/actual contacts.