

### Text Books:

1. Yashavant Kanetkar, "Let us Python: Python is Future, Embrace it fast", BPB Publications; 1 edition (8 July 2019).
2. Dusty Phillips, "Python 3 object-oriented Programming", Second Edition PACKT Publisher August 2015.
3. John Grayson, "Python and Tkinter Programming", Manning Publications (1 March 1999).
4. Core Python Programming, Dr. R. Nageswara Rao, Dreamtech Press
5. Beginning Python: Using Python 2.6 and Python 3.1. James Payne, Wrox publication
6. Introduction to computing and problem solving using python , E Balagurusamy, McGraw Hill Education.
7. Zed A. Shaw, "Learn Python the Hard Way: A Very Simple Introduction to the Terrifyingly Beautiful World of Computers and Code", Addison Wesley; 3 edition (1 October 2013).

### Reference Books:

1. Eric Matthes, "Python Crash Course A hands-on, Project Based Introduction to programming" No Starch Press; 1 edition (8 December 2015).
2. Paul Barry, "Head First Python" O'Reilly; 2 edition (16 December 2016)
3. Andreas C. Mueller, "Introduction to Machine Learning with Python", O'Reilly; 1 edition (7 October 2016)
4. David Beazley, Brian K. Jones, "Python Cookbook: Recipes for Mastering Python 3", O'Reilly Media; 3 edition (10 May 2013).
5. Bhaskar Chaudhary, "Tkinter GUI Application Development Blueprints: Master GUI programming in Tkinter as you design, implement, and deliver 10 real world application", Packt Publishing (November 30, 2015)

### Software Tools:

1. Python IDE: <https://www.python.org/downloads/>
2. Anaconda Environment: <https://www.anaconda.com/distribution/>

### Online Repository:

1. Github
2. Python 3 Documentation: <https://docs.python.org/3/>
3. "The Python Tutorial", <http://docs.python.org/release/3.0.1/tutorial/>
4. <http://spoken-tutorial.org>
5. Python 3 Tkinter library Documentation: <https://docs.python.org/3/library/tk.html>
6. Numpy Documentation: <https://numpy.org/doc/>
7. Pandas Documentation: <https://pandas.pydata.org/docs/>
8. Matplotlib Documentation: <https://matplotlib.org/3.2.1/contents.html>
9. Scipy Documentation : <https://www.scipy.org/docs.html>
10. Machine Learning Algorithm Documentation: <https://scikit-learn.org/stable/>
11. <https://nptel.ac.in/courses/106/106/106106182/>

**The following list of experiments and course project is for illustration purpose. Faculty members are required to introduce their own innovative list of experiments based on above curriculum.**

Sr. No.	Problem Statement	Module No.
1.	1. Write python programs to understand expressions, variables, quotes, basic math operations, list, tuples, dictionaries, arrays etc. 2. Write Python program to implement byte array, range, set and different STRING Functions (len, count, lower, sorted etc) 3. Write Python program to implement control structures.	Module 1