

## **ME502 Engineering Computing Laboratory (0-0-3-3)**

Review of C/C++; Programming assignments for numerical methods like Euler Method for 1st-order ODE, Gaussian Quadrature using C/C++; Review of Matlab and programming assignments for numerical differential and integration; Plotting functions: plot, bar, log-log, plotyy, polar, semilogx, semilogy, stairs, stem; Handling axis, title, legends, x and y label; Subplot; Three dimensional line plots, Surface mesh, Contour plots; Gauss Elimination Method

### **References**

1. Y. P. Kanetkar, Let Us C, BPB, 16th edition, 2018.
2. B. Gottfried and J. Chhabra, Programming with C, Tata Mcgraw Hill, 4th Edition, 2018.
3. RudraPratap, Getting Started with Matlab, Oxford University Press, 7th edition, 2016.
4. Stormy Attaway, Matlab: A Practical Introduction to Programming and Problem Solving, Butterworth-Heinemann Elsevier, 5th edition, 2018.