

## **ENG203 Computer Aided Engineering - I (1+0+0 1 Units)**

- C Programming: Introductory concepts, C fundamentals, operators and expression, data input and output, preparing and running a complete C program, control statements, functions, program structure, arrays, pointers, structures and unions, data files and low level programming.
- UNIX/Linux shell programming: types of shells, shell scripts, command substitution, conditional execution, iteration constructs, conditional execution, automatic repetitive tasks, passing parameters to shell scripts.
- Introduction to CAELinux packages for solving simple engineering problems  
– CFD software like Code-Saturne, OpenFOAM, Finite Element software like Salome-Meca, Analysis software like wxMaxima, Scilab, MATLAB, R Commander.