SUBJECT NO-CH49019, SUBJECT NAME- COMPUTER AIDED PROCESS ENGINEERING LAB.

LTP- 0-0-3,CRD- 2

SYLLABUS :-

Prerequisite-CH30016Computational aspect in solving different processes, i.e., VLE, Pressure drop in piping network, dynamic simulation of heat transfer equipment, distillation and absorption column, reactors etc.; Numerical techniques required for solving the above processes: Solution of set of non-linear algebraic equations (iterative methods with convergence accelerator), set of ODEs (RKF method), PDEs (Implicit and Explicit methods) by writing own code in higher level languages (C/C / Fortran etc.) and using MATLAB; Commercial packages like ASPEN (Equipment design and simulation, flow sheet simulation etc.), FLUENT (Fluid flow and heat transfer simulation etc.).