Course Type	Course Code	Name of the Course	L	T	P	Credits
DP	CHC309	**Process Simulation Lab**	0	0	2	2

Course Objective
The course is meant to familiarize the students with the fundamentals of simulation methodologies for tackling a wide range of problems of varying complexity encountered in process engineering, with the help of MATLAB.
Learning Outcomes
The students are given extensive hands-on training to employ MATLAB for simulating process engineering problems, so that the students are able to relate and appreciate the utility of simulation and usage of software packages towards solving problems encountered in both traditional and modern process engineering applications.

Unit No.	List of Experiments
1	Introduction to MATLAB
2	Solving system of linear & nonlinear equations
3	Linear regression
4	Curve fitting
5	Solving first order differential equation
6	Solving system of first order differential equations
7	Classification of second order, linear PDEs
8	Numerical solution of PDE and system of PDEs in MATLAB
9	Nonlinear Regression in MATLAB
10	Solving constrained and unconstrained optimization problems in MATLAB
11	Data Visualization in MATLAB