

Course Type	Course Code	Name of the Course	L	T	P	Credits
DP	CHC211	Process Control Lab	0	0	3	3

Course Objective
The course is aimed to impart hands-on training on various fundamental aspects of process dynamics and control and their applications in process industries.
Learning Outcomes
Students would learn about various concepts of process dynamics and control as well as measurement sensors, controllers and control valves

Unit No.	List of Experiments
1	Study of the Dynamics of a Temperature Sensor for a Given Step Size
2	Determination of Time Constant of the Thermocouple in Thermowell
3	Calibration of various temperature sensors
4	Study of the Dynamics of Stirred Tank Heater
5	Study of the Dynamics of Two Non-interacting Tanks in Series
6	Study of the Dynamics of Two Interacting Tanks in Series
7	Study of Control Valve Characteristics
8	Study of proportional (P) Controller using Computer-controlled Level Trainer
9	Study of Proportional-Integral (PI) Controller using Computer-controlled Flow Trainer
10	Study of Proportional-Integral-Derivative (PID) Controller Using Computer-controlled Temperature Trainer
11	Demonstration of Computer-controlled Distillation Column