

1.	Title of the course	Process Control Laboratory
2.	Course number	CH307P
3.	Structure of credits	0-0-3-2
4.	Offered to	UG
5.	New course/modification to	Modification To CH3294/12
6.	To be offered by	Department of Chemical Engineering
7.	To take effect from	January 2022
8.	Prerequisite	Nil
9.	<b>Course Objective(s):</b> To perform experiments for studying the dynamic response of process systems and instruments. To tune controllers and study the closed loop response of process systems.	
10.	<b>Course Content:</b> Interacting and non-interacting tank systems, level control, temperature control, pressure control, proportional-integral-derivative controller apparatus, control valve characteristics, simulation of control systems.	
11.	<b>Textbook(s):</b> 1. Seborg D E, Edgar T F, Mellichamp D A and Doyle F J, <i>Process Dynamics and Control</i> , 3rd Edition, Wiley India (2011). 2. Stephanopoulos G, <i>Chemical Process Control: An Introduction to Theory and Practice</i> , 1st Edition, Pearson Education India (2015).	
12.	<b>Reference(s):</b> 1. Coughanowr D R and LeBlanc S E, <i>Process Systems Analysis and Control</i> , 3rd Edition, Tata McGraw Hill (2013). 2. Ogunnaike B and Ray W H, <i>Process Dynamics, Modelling and Control</i> , 1st Edition, Oxford University Press (1994). 3. Sinnott R K and Towler G, <i>Coulson and Richardson's Chemical Engineering: Chemical Engineering Design, Volume 6</i> , 3rd Edition, Butterworth-Heinemann (2015).	