Type	Course Code	Name of Course	L	T	P	Credit
DP	NCHC511	Advanced Chemical Engineering Lab	0	0	3	1.5

Course Objective
• This laboratory course aims to acquaint the postgraduate students with advanced level experiments pertaining to various topics of fundamental chemical engineering.
Learning Outcomes
• The students will learn about advanced level experiments to reinforce various fundamental concepts of unit operations and unit processes.

Unit No.	List of Experiments
1.	Study the physical properties of complex fluids flow behaviour of surfactant/polymer solutions for industrial application
2.	Measurement of fluid flow
3.	Determination of the heat transfer coefficient in drop wise & film wise condensation
4.	Isothermal batch reactor (determination of activation energy)
5.	RTD in packed bed reactor (PBR)
6.	Simple binary distillation
7.	Adsorption studies
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.	X-Ray diffraction analysis
	Total Contact hours: 42