

COMPUTER AIDED DESIGN OF CHEMICAL EQUIPMENT-LAB

Course Code: 15CH1147

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Course Outcomes :

At the end of the Course, the Student will be able to:

- CO 1** Review the standard flow sheet symbols and construct a flow sheet using the symbols
- CO 2** Analyze a given situation, identify the type of heat exchanger, design and evaluate the heat exchanger
- CO 3** Identify and design a suitable evaporator for evaporation process
- CO 4** Design a distillation column and absorber for a given problem
- CO 5** Apply PRO-II and simulate distillation column, heat exchanger and absorber

LIST OF EXPERIMENTS/PROGRAMMES:

1. Introduction of different basic symbols and drawing flow sheet symbols.
2. Design of a Double Pipe Heat Exchanger
3. Design of a 1-2 shell & tube Heat Exchanger-Rating
4. Design of a 1-2 shell & tube Heat Exchanger-Sizing
5. Design of a Evaporator
6. Design of a Tray Distillation Column
7. Design of a Packed Distillation Column
8. Design of a Batch Reactor
9. Process simulation of Absorber using PRO-II
10. Process simulation of Distillation Column using PRO-II
11. Process simulation of LLE columns using PRO-II