

CH710: Essentials of Chemical Engineering for Non-Chemical Engineers

Day 1

8:00 - 8:30:	Registration and Continental Breakfast
8:30 - 10:00:	Chemistry vs. Chemical Engineering Safety and Chemical Handling
10:00 - 10:15:	Break
10:15 - 12:00:	Stoichiometry and Economics
12:00 - 1:00:	Lunch
1:00 - 3:00:	Kinetics, Reaction Engineering, Reactive Chemicals
3:00 - 3:15:	Break
3:15 - 4:00:	Fluid flow, Pumps, Viscosity, Laminar vs. Turbulent Flow
4:00 - 5:00:	Case Study

Day 2

8:30 - 9:30:	Heat Transfer and Heat Exchangers
9:30 - 10:00:	Cooling Towers
10:00 - 10:15:	Break
10:15 - 12:00:	Distillation
12:00 - 1:00:	Lunch
1:00 - 3:00:	Absorption, Stripping, Chromatography, Membranes
3:00 - 3:15:	Break
3:15 - 4:00:	Crystallization and Filtration
4:00 - 5:00:	Case Studies

Day 3

8:30 - 10:00:	Drying and Solids Handling
10:00 - 10:15:	Break
10:15 - 11:00:	Tanks and Vessels
11:00 - 12:00:	Polymers and Polymer Processing
12:00 - 1:00:	Lunch
1:00 - 2:00:	Process Control and Control Valves
2:00 - 3:00:	Final Case Study
3:00 - 3:15:	Break
3:15 - 5:00:	Final Questions, Discussions