Chemical Engineering - List of Laboratories & Equipment

(a) **Separation Process**
Distillation
Absorption
Extraction

(b) **Transport Phenomenon**
Fluid Flow
Heat Transfer
Mass Transfer

(c) **Reaction Engineering control**
Kinetics
Reactor Systems
Process Control Systems

Equipment Pilot Plants

1. Continuous distillation pilot plant –
2. Liquid-liquid extraction pilot plant
3. Reaction pilot plant –
4. Multi-stage evaporation unit

Laboratory Scale Teaching Units

1. Shell and tube heat exchanger
2. Heat conduction and radiation apparatus – heat transfer
3. Unit operation lab: rotary, tray, fluidized bed and pneumatic dryers
4. Drying ovens and furnace, incubators, fridges, freezers
5. Chemical Reactors – CSTR, plug flow, batch reactors
6. Refrigeration experimentation units
7. Multifunction Process Control Teaching System
8. Cooling tower for humidification and heat transfer studies
9. Absorption column
10. Flooding and loading bench apparatus
11. Vapour-liquid equilibrium measurement apparatus
12. Adsorption columns
13. Rheometer for rheological investigation of non-Newtonian fluids in fluid mechanics
14. Sieve shakers and a set of sieve plates

SCHOOL OF ENGINEERING
We Design, We Build

General Apparatus

Assorted glasswares, balances, water baths, Utilities

Utilities

New Boiler, compressor and vacuum pump

Analytical Equipment

Gas chromatograph, HPLC (High Performance Liquid Chromatograph), bomb calorimeter, spectrophotometer, centrifuges.