

# Employability-skills Training Programme

*Breaking barriers to meet industrial requirements*

**Eligibility:** Engineering students (chemical, petrochemicals, mechanical, instrumental, electrical) or M.Sc.(Chemical, industrial and analytical).

**Duration:** Two months

**Course Abstract:** Chemical and Petrochemical Plant operations: Orientation and on the job training. Certificates will be awarded on successful completion of the programme.

\*Course fees on request

## Course Content:

- Unit processes overview.-Organic chemical processes.
- Unit operations applicable for chemical plants- Fluid mechanics, Heat transfer, Mass transfer, Chemical reaction kinetics and stoichiometry.
- Process description, piping and instrumentation diagrams, Process flow diagram, Material balance, Energy balance and Basic Engineering for chemical process plants including manuals.
- Selection of equipments, instruments, datasheets, specifications. Examples of rating of equipments with specific requirements.
- Practical view of distillation columns, heat exchangers, pumps, compressors, their operation, efficiency.
- Consumption norms for raw materials, utilities. its calculations. Chemical plant production management of raw material stock, finished goods and inventories, model costing for a product.
- Pre-commissioning and commissioning activities of chemical plants incl. utilities.
- Safety in chemical plant operation, Process safety management tools like Hazop, QRA, evaluation of safety in plants and safety management system.
- On the job training in plant operation, DCS, PLC in shifts to familiarize operation team work.



“Our focus is on moulding engineers who can take on the real-world challenges faced by industries”