



## Advanced Course –Fertilizer Simulation Module

Founded by professional Chemical Engineers, CPC has long term agreement with Honeywell for UniSim Design software. This is to strengthen our commitment with our customers for process simulation modeling and training needs.

### ➤ Course Features

**(Duration: Eight days) –Sixty Four hours course;**  
**Everyday Eight hours with hands-on training**

- Basic Simulation Concepts.
- Fundamentals on Thermodynamics & Selection Criteria.
- What-If Analysis to improve Plant Capacity.
- Separation systems in Process Engineering Applications.
- Shell and Tube Heat Exchanger Simulation and Rating calculations
- Various workshops to model heat exchangers such as single phase & multiphase exchangers such as overhead condenser- Study of TEMA sheet, GA drawing, etc
- Batch Distillation and calculations
- Process design basis, PFD, P & ID Datasheets, Line lists & Safety study.
- Instrumentation, Control valve & Pressure Safety (relief valve selection & sizing).
- Reactor Simulations and comparison
- Upstream Operation
- Fertilizer Ammonia Plant Simulation
  - Primary Reformer
  - Secondary Reformer
  - CO HT/LT Shift
- Typical CO<sub>2</sub> & H<sub>2</sub>S removal model using Amines solvent

