



## Introduction to Simulation

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: Four days)- Thirty Two hours course;**  
**Everyday Eight hours with hands-on training**

#### Day I

- General Simulation Concepts
- General Structure of Simulators
- Introduction to Graphical User Interface
- Unit Operation Model Overview
- Selection of Appropriate models for simulation
- Developing Flow sheet in Simulator
- Workshop on Benzene Flash



#### Day II

- Workshop on Propane refrigeration cycle
- Overview of Thermodynamic Models
- Material Balances, energy balances, tie-lines concentration diagrams
- Thermodynamic equilibrium concept
- Gibbs free energy, equilibrium, equilibrium constants, phase changes
- General expressions for fugacity, enthalpy, entropy, heat capacity
- Understanding how thermodynamic models affect process calculations
- Sources for pure component and mixture data
- Comprehensive Physical Property Workshop for Oil and Gas separation



- **Note:** The courses are available on continuous as well as Weekend basis. For Course Schedule
- send us an enquiry on [cpcm@vsnl.net](mailto:cpcm@vsnl.net)

#### Day III

- Azeotrope determination.
- Workshop on NGL Fractionation train
- Workshop on Methanol Water separation
- Workshop on Reactors
- Case studies (What if Analysis) on several workshops

#### Day IV

- Workshop on Cyclohexane production with recycle loops
- Workshop on Upstream operation.
- Practice session