
Course Title : Chemical Engineering Thermodynamic

- **Aim:**

The goal of this course is to familiar students with principles of thermodynamics and application of thermodynamics in process simulation

- **Syllabus:**

- ✓ Introduction to thermodynamic
- ✓ Heat and work in the system and surround
- ✓ First law of thermodynamic
- ✓ Application of first law in close and open systems
- ✓ Equation of state for non-ideal gas
- ✓ Thermodynamic property of pure fluid and mixtures
- ✓ Second and third law of thermodynamic
- ✓ Residual properties

- **Reading Resources**

- ✓ Engineering and Chemical Thermodynamics Milo D. Koretsky
- ✓ Introduction to Chemical Engineering Thermodynamics J. M, Smith H. C. Van Ness M. M. Abbott
- ✓ Chemical, Biochemical, and Engineering Thermodynamics Stanley I. Sandle