

SYLLABUS :-

Prerequisite - none

Estimation of properties: Real fluids and their mixtures, computer aided algorithms for property estimation and their applications to chemical engineering processes.

Heat effects of industrial reactions: Theory and applications.

Multiphase processes and multi component equilibria; Chemical reaction equilibria; Thermodynamic analysis of real processes.

Text Book:

1. Chemical Engineering Thermodynamics by Smith and Van Ness
2. Chemical Engineering Thermodynamics by Y. V. C. Rao
3. Chemical Engineering Thermodynamics by B. G. Kyle
4. Phase Equilibrium thermodynamics by Prausnitz
5. Engineering Thermodynamics by P. K. Nag
6. Engineering Thermodynamics by Y. V. C. Rao