

# CHEG-291: Advanced Kinetics

This course is an introduction to advanced thermodynamic and kinetic analysis of chemical processes. We build on your introduction to thermodynamics by studying solutions, multiphase systems, and equilibrium. We will cover thermodynamic aspects of phase diagrams, partial molar quantities, thermodynamics of mixing, chemical potential, liquid mixtures, colligative properties, vapour pressure diagrams, liquid-liquid phase diagrams, solid-liquid phase diagrams, activity coefficients, spontaneous chemical change, gas equilibrium, response of equilibrium to external conditions, and extent of chemical reaction

**Credits:** 3

**Program:** Chemical Engineering