Catalog Description
Construction and convergence of chemical processes in a process simulator. Students will understand how to access variables, define and converge design specifications and converge tear/recycle streams.

Prerequisites
Prerequisite(s): CHME 352L. Corequisite(s): CHME 452.

Textbooks
none

Course Objectives
Students will (1) demonstrate the expected level of proficiency in applying the concepts listed under “Topics Covered”; and (2) select appropriate software models when solving problems.

Topics Covered
- Input from the Aspen Plus® Graphical User Interface (GUI)
- Specify unit operations in Aspen Plus®
- Perform a sensitivity analysis and an optimization
- Apply a design specification in Aspen Plus®
- Use Calculator Blocks as Fortran or Excel
- Specify a catalytic reactor with LH kinetics
- Optimize a RADFRAC distillation column on an economic basis
- Converge complex multicomponent RADFRAC distillations

Class/Laboratory Schedule
- Lecture Meeting Time: M 1630-1720
- Meeting Location: EC3 234

Document Preparation
Prepared by David A. Rockstraw, Ph.D., P.E. on August 24, 2015

Grades
1000 point basis:
- lab projects/homework 450
- quizzes 450
- Final Exam 100
- AIChe Community Service 20 points each (max 5)

Grading Scale → A ≥ 93%; B ≥ 84%; C ≥ 75%; D ≥ 70%

The NMSU Department of Chemical & Materials Engineering maintains a syllabus addendum containing course requirements common to all courses with a CH E prefix. This document is accessible from the URL: http://chme.nmsu.edu/academics/syllabi/chme-common-syllabus-addendum/