This course provides a capstone experience that brings together material from previous courses to examine contemporary problems in chemical engineering process design. The course provides instruction in the conceptual design of processes to achieve design goals, as well as the economic optimization of the process. The course emphasizes the use of computer simulations, theory of unit operations, process control safety, environmental and economic factors. The effect of changes in design on the process economics will be investigated. Written and oral design reports for the capstone design project are required.

**Lessons:** 40 @ 55 min (2.500 Att/wk)  
**Labs:** 7 @ 120 min

**Special Requirements:**  
The completion of significant out-of-class design problems requiring the equivalent of 2.5 credit hour of student effort. Compensatory time is provided to complete the design requirement.

**Prerequisite(s):**  
CH365 CH459 CH485