

# Chemical Engineering

## *Elective Focus Area*

### Five Year BS/MS

#### 1. Courses satisfying BS Requirements only

##### General Education Components (15 semester hours)

*Courses consistent with career goals and interests.*

##### Statistics Elective (3 semester hours)

STAT:2020 Probability and Statistics for Engineering and Physical Sciences 3 s.h.

##### Advanced Chemistry Lab (2 or 3 semester hours)

Advanced Chemistry Lab from same sequence chosen for lectures 2 or 3 s.h.

##### Free Electives (9 (or 10) semester hours of engineering or science courses consistent with MS research topic)

*Note: Advanced Chemistry Lab semester hrs plus Free Electives semester hours must total 12 s.h.*

##### Chemical Engineering Core courses (86 semester hours)

#### 2. Cross-credited courses satisfying both BS and MS Req. (12 s.h.)

##### Required Course (3 semester hours for cross-crediting)

CBE:5205 Introduction to Biochemical Engineering 3 s.h.

##### Advanced Chemistry Lecture Electives (6 semester hours for cross-crediting)

*(Choose the 100 level Analytical, Physical, or Biochemical sequence as described on CBE Website)*

Advanced Chemistry Course 3s.h.

Advanced Chemistry Course 3 s.h.

##### Engineering Elective (3 semester hours for cross-crediting)

*(Choose one of the following courses)*

CBE:5110 Intermediate Thermodynamics 3 s.h.

CBE:5152 Transport Phenomena I 3 s.h.

#### 3. Courses satisfying MS Requirements only

##### Remaining Graduate Program Core Courses

Intro to Lit Review & Technical Writing (CBE:5104) 3 s.h.

Other course not taken as Engineering elective above (CBE:5110 or CBE:5152) 3 s.h.

##### Advanced Graduate Program Electives (6-12 semester hours)

*(6 hrs if thesis option, 12 hours if non-thesis option, course selection in consultation with advisor)*

##### MS Research (0-6 semester hours)

*(6 hrs if thesis option, 0 hrs if non-thesis option)*