

CHEMICAL ENGINEERING

Curriculum for Students Who Entered **AFTER** June 2018

Year	Fall	Spring
1	<u>19 Credits</u> ENGLWP 112 (3 cr) ENGIN 110 (3) MATH 131 (4) CHEM 111 (4) *Social World Elective (4) **ENGIN 191 (1)	<u>15 Credits</u> ChE 120 Fundamentals (3) PHYSICS 151 (4) MATH 132 (4) CHEM 112 (4)
2	<u>19 Credits</u> PHYSICS 152 (4) ChE 226 Thermo 1 (3) ChE 291A Professional Seminar (1) ***ChE 220 -Bio Requirement (4) MATH 233 (4) CHEM 261 (3)	<u>14 Credits</u> ChE 231 Math Modeling (3) ChE 325 Thermo 2 (3) MATH 331 (3) CHEM 262 (3) CHEM 269 (2)
3	<u>16 Credits</u> ENGIN 351-Junior Writing (3) ChE 320 Kinetics (3) ChE 330 Fluid Mechanics (3) ChE 391A Professional Seminar (1) ChE 475 Phys Chem (3) Technical Elective (3)	<u>16 Credits</u> ChE 333 Heat and Mass (3) ChE 338 Separations (3) Adv Chem Elective (3) Technical Elective (3) Social World Elective (4)
4	<u>15 Credits</u> ChE 401 Senior Lab (4) ChE 444 Process Design (3) ChE 446 Process Control (3) ChE 491A Professional Seminar (1) Social World Elective (4)	<u>14 Credits</u> ChE 402 (4) Technical Elective (3) Technical Elective (3) Social World Elective (4)

* All entering students are required to take one of their two required diversity courses within their first year on campus

** All Engineering students are required to enroll in a 1-credit Freshman Seminar in their first semester

***All ChE majors are expected to take ChE 220. Exceptions: 1) We will accept AP Bio, which comes in as Bio 110. 2) We will accept Bio 151 taken previously or as a transfer course. All other exceptions: Contact Tami (112E Goessmann).

Policies regarding your Social World, Adv Chem, and Technical Electives are on the other side

This page contains information regarding your elective options. **Use your Academic Requirement Report (ARR) on SPIRE** to see which graduation requirements you have fulfilled. These include GPA, General Education, and Major Requirements.

General Education Courses

Social World Elective Requirements	Diversity Requirements
AL or AT SB HS AL, AT, I, SB, or SI	DU DG All entering students are required to take one of their two diversity courses within their first year on campus

Note: A single course can satisfy one requirement from each of the above columns, but within a column, each requirement must be met by a separate course. You will need a minimum of four courses.

Advanced Chemistry Elective

One course, minimum 3 credits, at the 200 level or above in Chem or Biochem OR Polymer 501

Exceptions: Chem 250, Chem 391A, Chem 471, Biochem 471

Note: A course may NOT be used as both your Advanced Chemistry Elective and as a Technical Elective

Technical Electives

Students are required to take 4 Technical Electives. At least 2 must be Engineering Technical Electives

Approved Engineering Technical Electives (minimum 2)	Approved Non-Engineering Technical Electives (up to 2)
Any 3 or 4 credit course at the 200-level or above in BME, ChE, ECE, MIE, CEE, or POLYMER SCH-MGMT 593*, SCH-MGMT 597* Exceptions: BME 210, CEE 357, MIE 230, MIE 340, MIE 354 *SCH-MGMT 593 and SCH-MGMT 597 are special topics courses, and the topic must be approved by the UPD at the time of enrollment	Any 3 or 4 credit course at the 200-level or above in Math, Physics, Bio, CompSci, Chem, Biochem, or MCB ACCT 221, FIN 301, MGT 301, MKTG 301, OIM 301, STATISTICS 501 Exceptions: Chem 250, Chem 330, Chem 471, Biochem 471, and Math 370 Note: While the department accepts the business classes listed above as tech electives, we have no ability to facilitate enrollment in Isenberg courses.

Independent Studies: Students are allowed to count ONE independent study towards their required Technical Electives. However, if you are in the departmental honors program, you will need to take both ChE 499Y and ChE 499T during your senior year and these will both count as Engineering Technical Electives.

Note: A course may NOT be used as both your Advanced Chemistry Elective and as a Technical Elective

Entering the Major

Effective May 1, 2018, to be eligible to enter a BS degree program in engineering, a student must have a cumulative AND most recent semester GPA of 2.0 or higher and a grade of C or better in the following classes:

- 1) ENGLWP 112
- 2) Math 131
- 3) Math 132
- 4) ENGIN 100, 110, 111, 112, 113, or 114
- 5) Physics 151
- 6) Chem 111 or Physics 152
- 7) 2nd semester Engineering Intro Course satisfying major requirement (i.e. ChE 120, CEE 121, ECE 122, or MIE 124)