Chemical and Biomolecular Engineering Catalog 2022

### Fall

**Chem 132 or 141 or 147 (3-4) (QR) FA, SP, SU**
Prereq: Math 141 is ACT Math 28 or SAT Math 660

**Chem 122(3) and 123(1) or 128 (4) (NS) FA, SP, SU**
Prereq: Math 119; recommended background in Math 131

**EF 142 or 151 or 157 (4) (EI) FA, SP**
Prereq: EF 151 or 157

**EF 105 (1) FA, SP**
Coreq: EF 105 or CS 101 or CS 102

**English 101/118 or 198 or 131 (3) FA, SP, SU**
Prereq: EF 152 or 158 and EF 152/158 & Chem 132 & 133 or 138

**Social Science (SS)**
Prereq: EF 102 or 290 or 298 or 132 (3) FA, SP, SU

**Fall Math 241 or 247 (4) FA, SP, SU**
Prereq: Math 142 or 148

**CBE 201 (4) FA, SU**
Prereq: EF 152/158 & Chem 132 & 133 or 138

**CBE 235 (3) FA**
Prereq: EF 152 or 158 and Chem 132 and 133 or 138

**Chem 210 (3) AND 219 (1) FA, SP**
Prereq: Chem 132 and 133 or 138

**Vol Core (3) FA, SP, SU**
Prereq: EF 152 or 158 and EF 152/158 & Chem 132 & 133 or 138

Prereq: EF 101 or 118; 290 Prereq AP 101 credit

### Spring

**Math 241 or 247 (4) FA, SP, SU**
Prereq: Math 142 or 148

**CBE 240 (4) SP**
Prereq: EF 152/158 & Chem 132 & 133 or 138

**CBE 250 (4) SP, SU**
Prereq: EF 152/158 & Chem 132 & 133 or 138

**Physics 231 (3) FA, SP, SU**
Prereq: Phys 135 or EF 151 and 152

**Vol Core (3) FA, SP, SU**
Prereq: EF 152 or 158 and EF 152/158 & Chem 132 & 133 or 138

**Spring Math 260 or 268 (3) FA, SP, SU**
Prereq: EF 152/158 & Chem 132 & 133 or 138

**CBE 301 (4) FA**
Prereq: CBE 201, 240, and 250

**CBE 350 (4) FA**
Prereq: CBE 201, 240, and 250

**Vol Core (3) FA, SP, SU**
Prereq: EF 152 or 158 and EF 152/158 & Chem 132 & 133 or 138

**Vol Core (3) FA, SP, SU**
Prereq: EF 152 or 158 and EF 152/158 & Chem 132 & 133 or 138

**Global Citizenship United States (GCUS)**
Prereq: EF 152 or 158 and EF 152/158 & Chem 132 & 133 or 138

**Fall Chemistry 260 or 268 (3) FA, SP, SU**
Prereq: EF 152/158 & Chem 132 & 133 or 138

**CBE 301 (3) FA, SU**
Prereq: CBE 201, 240, and 300

**CBE 340 (3) SP, SU**
Prereq: CBE 201, 240, and 300

**CBE 360 (3) SP, SU**
Prereq: CBE 201, 240, and 300

**Bio Option I **(3)** FA, SP, SU**
Prereq: CBE 201, 240, and 300

**Tech. Elective (3) FA, SP, SU**
Prereq: CBE 201, 240, and 300

**Tech. Elective (2) FA, SP, SU**
Prereq: CBE 201, 240, and 300

**Tech. Elective (3) FA, SP, SU**
Prereq: CBE 201, 240, and 300

**Vol Core (3) FA, SP, SU**
Prereq: CBE 201, 240, and 300

**Vol Core (3) FA, SP, SU**
Prereq: CBE 201, 240, and 300

**Vol Core (3) FA, SP, SU**
Prereq: CBE 201, 240, and 300

**Vol Core (3) FA, SP, SU**
Prereq: CBE 201, 240, and 300

**Vol Core (3) FA, SP, SU**
Prereq: CBE 201, 240, and 300

**Vol Core (3) FA, SP, SU**
Prereq: CBE 201, 240, and 300

### Spring

**CBE 445 (3) FA**
Prereq: CBE 340 and 360

**CBE 480 (4) FA**
Prereq: CBE 340 and 360 and Chem. 360 or 368; Coreq: CBE 445

**CBE 415 (WC and EI) (3) FA**
Prereq: CBE 340 and 360; English 102, 132, 290, or 298

**Tech. Elective (2) FA, SP, SU**
Prereq: CBE 340 and 360

**Tech. Elective (3) FA, SP, SU**
Prereq: CBE 340 and 360

**Tech. Elective (3) FA, SP, SU**
Prereq: CBE 340 and 360

**Vol Core (3) FA, SP, SU**
Prereq: CBE 340 and 360

**Vol Core (3) FA, SP, SU**
Prereq: CBE 340 and 360

**Vol Core (3) FA, SP, SU**
Prereq: CBE 340 and 360

**Vol Core (3) FA, SP, SU**
Prereq: CBE 340 and 360

**Global Citizenship International (GCI)**
Prereq: CBE 340 and 360

### Notes

* Chem Option I: Any 200 level or above BCMB courses; any 200-level or above CHEM courses; Environmental Engineering 554, 562; MSE 201/207; MSE 340/347; MSE 360/367; any 200-level or above MICR courses.


*** One technical elective must be a chemical and biomolecular engineering course, with the exclusion of CBE 457. CBE 201 or 207 can be used as technical elective, if not used to satisfy Chem Option 1.

### Progression to Upper Division

Progression of students in the Department of Chemical and Biomolecular Engineering to departmental courses numbered 310 and above is competitive and is based on capacity. Factors considered include overall grade point average, performance in selected lower-division courses, and evidence of satisfactory and orderly progress through the prescribed curriculum.

### Upper-Division Status

A lower-division student must apply for progression to upper division status after completing CBE 201, CBE 235, CBE 240, and CBE 250 with a grade of C - or better in each course and an overall GPA of 2.3 or better. Grades of C- or better in these four courses are required for graduation.

### Provisional Status

Students who have completed CBE 201, CBE 235, CBE 240, and CBE 250 with an overall GPA of at least 2.3 may apply for provisional status. Any student granted provisional status must retake the 200 level CBE course or courses in which a grade less than C- was earned and achieve a C- or better to be admitted to full upper-division status. Grades of C- or better in these four courses are required for graduation. The granting of provisional upper-division status is based on availability of space in the departmental programs after upper-division status students have been accommodated. Provisional students are required to demonstrate the ability to perform satisfactorily in upper-division courses by completing a total of seven departmental courses with a grade of C or better in each course (including the four required for upper-division status). Permission to continue with upper-division classes depends on this minimum level of performance.

Any student with an overall GPA below 2.1 will not be admitted to upper-division chemical and biomolecular engineering courses. Students who have not been admitted to upper-division or provisional status will be dropped from upper-division departmental classes.

Students also have opportunities for an Honors Concentration. See the Undergraduate Catalog for details and requirements.