

## Chemical and Biomolecular Engineering Catalog 2025

Fall 16 hours	<b>Math 132 or 141 or 147 (3-4) (QR) FA,SP,SU</b> Math 132 Prereq- Math 131 Math 141 Prereq- ACT Math 28 or SAT Math 660	<b>Chem 122(3) and 123(1) or 128 (4) (NS) FA, SP, SU</b> Prereq-Math 119; recommended background in Math 131	<b>EF 142 or 151 or 157 (4) (E) FA, SP</b> EF 142 Prereq- EF 141 with C- or better and Math 131 EF 142 Coreq- Math 132 EF 151 Coreq- 141/147 or higher and EECS majors COSC 101/102	<b>EF 105 (1) FA, SP</b> Coreq- EF 152 or 158	<b>English 101 or 131 (3) FA, SP, SU</b> 101 Standard; 131 English as Second Language	
Spring 15 hours	<b>Math 142 or 148 (4) (QR) FA, SP, SU</b> Prereq- Math 132 or 141 or 147	<b>Chem 132(3) and 133(1) or 138 (4) (NS) FA, SP, SU</b> Prereq- Chem 122 and 123 or 128	<b>EF 152 or 158 (4) (NS and E) FA, SP, SU</b> Prereq- EF 142/151/157 with C or higher Coreq- Math 142 or 148 and EF 105 or COSC 101 or 102	<b>English 102 or 112 or 298 or 132 (3) FA, SP, SU</b> 102 Prereq 101; 112 Prereq is AP 101 and Test Scores; 298 Prereq University Honors only; 132 Prereq 131 ESL		
Fall 17 hours	<b>Math 231 or 237 (3) FA, SP, SU</b> Prereq- Math 142 or 148	<b>CBE 201 (4) FA, SU</b> Prereq- EF 152/158 & Chem 132 & 133 or 138 Coreq- Math 231	<b>CBE 235 (3) FA</b> Prereq- EF 152 or 158 and Chem 132 and 133 or 138	<b>Chemistry 260 or 268 (3) and 269 (1) FA, SP, SU</b> Prereq- Chemistry 132 and 133 or 138	<b>Vol Core (3) FA, SP, SU</b> Social Science (SS)	
Spring 16 hours	<b>Math 241 or 247 (4) FA, SP, SU</b> Prereq- Math 142 or 148	<b>CBE 240 (3) SP</b> Prereq- EF 152/158 & Chem 132 & 133 or 138 Coreq- Math 241 or 247	<b>CBE 250 (3) SP, SU</b> Prereq- EF 152/158 & Chem 132 & 133 or 138 Coreq- Math 241 or 247	<b>Science Option* (3) FA, SP, SU</b> See note below***	<b>Vol Core (3) FA, SP, SU</b> Expanded Perspectives- choose from AH, AAH, GCUS, GCI, or SS	
Fall 15 hours	<b>CBE 301 (3) FA</b> Prereq- CBE 201, 240, and 250 or consent of instructor	<b>CBE 330 (3)</b> Prereq- CBE 201, 240, 250 with C- or better; and Math 241 or 247	<b>CBE 340 (3) FA</b> Prereq- CBE 201, 240 and 250 with a grade of C- or better	<b>Chem Option I**(3) FA, SP, SU</b> See note below***	<b>Vol Core (3) FA, SP, SU</b> Global Citizenship United States (GCUS)	
Spring 18 hours	<b>CBE 320 (3) (OC) SP</b> Prereq- CBE 201, 240, and 250 with C- or better Coreq- CBE 301 and 350	<b>CBE 445 (3) SP</b> Prereq- CBE 340 and 360	<b>CBE 350 (3) SP</b> Prereq- CBE 201, 240 and 250 with a grade of C- or better Coreq- CBE 301	<b>Technical Elective*** (3) FA, SP, SU</b> See note below***	<b>Technical Elective*** (3) FA, SP, SU</b> See note below***	<b>Vol Core (3) FA, SP, SU</b> Global Citizenship International (GCI)
Fall 16 hours	<b>CBE 360 (3) FA</b> Prereq- CBE 201, 240 and 250 Coreq- Math 231	<b>CBE 480 (4) FA</b> Prereq- CBE 340 and 360 and Chem. 360 or 368; Coreq- CBE 445	<b>CBE 415 (WC and EI) (3) FA</b> Prereq- CBE 340 and 360; English 102, 112, 132, or 298 Coreq- CBE 301 and 350; and CBE major	<b>CBE Elective**** (3) FA, SP</b> See note below***	<b>Vol Core (3) FA, SP, SU</b> Expanded Perspectives- choose from AH, AAH, GCUS, GCI, or SS	
Spring 15 hours	<b>CBE 488 or 490 (3) SP (AOC)</b> Prereq- CBE 445 and 480	<b>Engineering Elective**** (3) FA, SP</b> prior approval by petition with Advisor	<b>Technical Elective*** (3) FA, SP, SU</b> See note below***	<b>CBE Elective**** (3) FA, SP</b> See note below***	<b>Vol Core (3) FA, SP, SU</b> Arts and Humanities (AH)	

\***Science Option:** Physics 231; Biology 240; Chemistry 360/368 can only count for one option.

\*\* **CHEM Option I:** CHEM 210, 370, 380, CHEM 360/368 can only count for one option.

\*\*\* **Technical Elective Choices:** CHEM 219, 359, 379, 389, 490; BCMB 230, 310, 321, 333, 401, 402, 405, 415, 419, 422, 433, 440, 459, 461; BIOL 211, 220, 229; Math 251/257, 300/307, 323, 341, 371, 405, 411, 421, 424, 431, 435; MICR 210, 321, 329, 330, 411, 420, 429, 431, 440; NUTR 311; PHYS 250, 311, 342, 405; STAT 251; any Engineering course 200 level or higher except AE 201/BME 201, CE/ENVE 205, ENVE 200, ME 331, 344.

The following courses cannot double count as technical elective or science or chem options: Chem 210, 360/368, 370, 380; BIOL 240; PHYS 231, 232.

\*\*\*\***CBE Elective:** Any CBE course not already required for the degree.

\*\*\*\*\***Engineering Elective:** Prior approval by petition with Advisor.

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