

## Chemical and Biomolecular Engineering Catalog 2024

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) (EI) 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 EF 105 or COSC 101 or CS 102	<b>EF 105 (1) FA, SP</b> Coreq- EF 151 or 157	<b>English 101 or 131 (3) FA, SP, SU</b> 101 Standard; 131 English as Second Language
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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 EI) FA, SP, SU</b> Prereq-EF 142/151/157 with C or higher Coreq- Math 142 or 148	<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
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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>Chem 210 (3) AND 219 (1) FA, SP</b> Prereq- Chem 132 and 133 or 138	<b>Vol Core (3) FA, SP, SU</b> Social Science (SS)
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Spring 17 hours	<b>Math 241 or 247 (4) FA, SP, SU</b> Prereq- Math 142 or 148	<b>CBE 240 (4) 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>Physics 231 (3) FA, SP, SU</b> Prereq- Phys 135 or EF 151 and 152 Coreq- Math 142 or 148	<b>Vol Core (3) FA, SP, SU</b> Expanded Perspectives- choose from AH, AAH, GCUS, GCI, or SS
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Fall 17 hours	<b>Chemistry 260 or 268 (3) FA, SP, SU</b> Prereq- Chemistry 132 and 133 or 138	<b>CBE 301 (4) FA</b> Prereq- CBE 201, 240, and 250 or consent of instructor	<b>CBE 350 (4) FA</b> Prereq- CBE 201, 240 and 250 with a grade of C- or better Coreq- CBE 301	<b>CBE 330 (3)</b> Prereq- CBE 201, 240, 250 with C- or better; and Math 241 or 247	<b>Vol Core (3) FA, SP, SU</b> Global Citizenship United States (GCUS)
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Spring 15 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 340 (3) SP, SU</b> Prereq- CBE 201, 240 and 250 with a grade of C- or better	<b>CBE 360 (3) SP, SU</b> Prereq- CBE 201, 240 and 250 Coreq- Math 231	<b>Bio Option I ** (3) FA, SP, SU</b>	<b>Tech. Elective (3) FA, SP, SU</b> Petition required in advance See note below**
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Fall 16 hours	<b>CBE 445 (3) FA</b> Prereq- CBE 340 and 360	<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>Tech. Elective*** (3) FA, SP, SU</b> Petition required in advance	<b>Vol Core (3) FA, SP, SU</b> Expanded Perspectives- choose from AH, AAH, GCUS, GCI, or SS
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Spring 15 hours	<b>CBE 488 or 490 (3) SP (AOC)</b> Prereq- CBE 445 and 480	<b>Chem Option I *(3) FA, SP, SU</b>	<b>Tech. Elective*** (3) FA, SP, SU</b> Petition required in advance	<b>Vol Core (3) FA, SP, SU</b> Global Citizenship International (GCI)	<b>Vol Core (3) FA, SP, SU</b> Arts and Humanities (AH)
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\* **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.

\*\* **Biology Option I:** BCMB 230, BCMB 311, BCMB 321, BCMB 401, BCMB 402, BCMB 412, BCMB 415; BIOL 220/229, BIOL 240, BIOL 260/269, BIO 280; MICR 210, MICR 321, MICR 329.

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

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