

Chemical and Biomolecular Engineering Course Planning Guide (37 CUs)

Entered 2020 or Later

Mathematics/Natural Sciences (12 CU)

- MATH 104 / 1400
- MATH 114 / 1410
- MATH 240 / 2400
- MATH 241 / 2410
- CHEM 101 / 1012
- CHEM 053 / 1101
- CHEM 102 / 1022
- CHEM 054 / 1102
- PHYS 140 / 150 / 170 / 0140 / 0150 / 0170 *or* MEAM 110 / 1100*
- PHYS 141 / 151 / 171 / 0140 / 0150 / 0170 *or* ESE 112 / 1120*
- CHEM 221 / 2210 *or* MSE 221 / 2210
- CHEM 241 / 2410
- CHEM 242 / 2420 *or* 243 / 2425 *or* 251 / 2510

Technical Electives (5 CUs)

- CBE Elective** _____
- Engineering Elective _____
- CHEM 223 / 2230 *or* 244 / 249 *or* 2411 / 2421 *or* CBE 480 / 4800
- Math/Nat Sci/Eng Elective*** _____
- Math/Nat Sci/Eng Elective*** _____

CBE Core Curriculum (13 CUs)

- ENGR 105 / 1050 *Intro to Scientific Computing*
- CBE 160 / 1600 *Intro to Chemical Engineering*
- CBE 230 / 2300 *Material and Energy Balances*
- CBE 231 / 2310 *Thermodynamics of Fluids*
- CBE 350 / 3500 *Fluid Mechanics*
- CBE 351 / 3510 *Heat and Mass Transport*
- CBE 353 / 3530 *Molec. Thermo. & Chem. Kin.*
- CBE 360 / 3600 *Chemical Process Control*
- CBE 371 / 3710 *Separation Processes*
- CBE 400 / 4000 *Intro to Product & Process Design*
- CBE 410 / 4100 *Chemical Engineering Laboratory*
- CBE 451 / 4510 *Chemical Reactor Design*
- CBE 459 / 4590 *Product & Process Design Projects*

General Electives (7 CUs)

- EAS 203 / 2030
- WRIT _____
- SS/H _____
- SS/H _____
- SS/H _____
- SS/H/TBS _____
- SS/H/TBS _____

UNDERGRADUATE FACULTY ADVISOR SIGN-OFF

Student Name: _____ **Faculty Advisor:** _____

- I have met with the above student; please clear this student to register for next semester.

Faculty Advisor Signature: _____ **Date:** _____

*One Tech Elective waived if PHYS 150 / 151 / 0150 / 0151 or 170 / 171 / 0170 / 0171 taken

**CBE 300 / 3000 level or above

***Independent Study (CBE 099 / 0099) can be used

Four-Year Plan

Freshman Year

Fall Semester (20__)	Spring Semester (20__)

Sophomore Year

Fall Semester (20__)	Spring Semester (20__)

Junior Year

Fall Semester (20__)	Spring Semester (20__)

Senior Year

Fall Semester (20__)	Spring Semester (20__)

**One Tech Elective waived if PHYS 150 / 151 / 0150 / 0151 or 170 / 171 / 0170 / 0171 taken*
***CBE 300 / 3000 level or above*
****Independent Study (CBE 099 / 0099) can be used*