

Bachelor of Science in Chemical Engineering - 4 Year 2 Co-op Program CURRICULUM OUTLINE - Class of 2020

Sample Only – Actual Curriculum Sequence May Deviate from Sample

| | FALL | | | SPRING | | | SUMMER 1 | | | SUMMER 2 | | | |
|--------------|---------------------------|--|---------------------------|--------------------------|--|------------------------------|--------------------------|-------------------------|--------------------|--------------------------|---------------------|---|---|
| Year 1 | MATH1342 | Calculus 2 for Engrs. | 4 | MATH2321 | Calculus 3 for Engrs. | 4 | CHME2308 | ChE Conservation Princ. | 4 | Vacation | | | |
| | CHEM1151 | General Chem for Engrs. | 4 | PHYS1151 | Physics 1 for Engrs. | 4 | PHYS1155 | Physics 2 for Engrs. | 4 | | | | |
| | CHEM1153 | Recitation for CHEM1151 | 0 | PHYS1152 | Physics 1 Lab | 1 | PHYS1156 | Lab for PHYS1155 | 1 | | | | |
| | GE1000 | Intro. to Eng'g. | 1 | PHYS1153 | ILS for PHYS1151 | 0 | PHYS1157 | ILS for PHYS1155 | 0 | | | | |
| | GE1501 | Cornerstone Eng'g 1 | 4 | GE1502 | Cornerstone Eng'g 2 | 4 | | | | | | | |
| | ENGW1111 | College Writing | 4 | Elective | General Elective 1 | 4 | | | | | | | |
| Year 2 MC | MATH2341 | Diff. Eq./Lin. Alg. | 4 | CHEM2313 | Organic Chem. 2 | 4 | Elective | General Elective 3 | 4 | Co-op | | | |
| | CHEM2311 | Organic Chemistry 1 | 4 | CHEM2314 | Lab for CHEM2313 | 1 | Elective | General Elective 4 | 4 | | | | |
| | CHEM2312 | Lab for CHEM2311 | 1 | CHEM2320 | Recitation CHEM2313 | 0 | | | | | | | |
| | CHEM2319 | Recitation for CHEM2311 | 0 | CHME2000 | Intro. to Eng'g. Co-op | 1 | | | | | | | |
| | CHME2310 | Transport Processes 1 | 4 | CHME2320 | ChE Thermodynamics 1 | 4 | | | | | | | |
| | CHME2311 | Lab for CHME2310 | 2 | BIOL1115 | Biology | 4 | | | | | | | |
| | Elective | General Elective 2 | 4 | | | | | | | | | | |
| Year 2 MD | MATH2341 | Diff. Eq./Lin. Alg. | 4 | Co-op | | | Co-op | | | CHEM2313 | Organic Chem. 2 | 4 | |
| | CHEM2311 | Organic Chemistry 1 | 4 | | | | | | | CHEM2314 | Lab for CHEM2313 | 1 | |
| | CHEM2312 | Lab for CHEM2311 | 1 | | | | | | | CHEM2320 | Recitation CHEM2313 | 0 | |
| | CHEM2319 | Recitation for CHEM2311 | 0 | | | | | | | CHME2320 | ChE Thermo. 1 | 4 | |
| | CHME2000 | Intro. to Eng'g. Co-op | 1 | | | | | | | | | | |
| | CHME2310 | Transport Processes 1 | 4 | | | | | | | | | | |
| | CHME2311 | Lab for CHME2310 | 2 | | | | | | | | | | |
| Year 3 MC | ENGW3302 | Adv Writing in the Tech Prof (to be taken online) | 4 | CHME3000 | Prof. Issues in Eng'g. | 1 | Elective | General Elective 5 | 4 | Co-op | | | |
| | Co-op | CHME3312 | Transport Processes 2 | 4 | CHME3312 | Lab for CHME3312 | 2 | Elective | General Elective 6 | | | | 4 |
| | | CHME3313 | Lab for CHME3312 | 2 | CHME3322 | ChE Thermodynamics 2 | 4 | | | | | | |
| | | CHME3322 | ChE Thermodynamics 2 | 4 | CHME4701 | Cpstn 1: Sep. & Proc. Anlys. | 4 | | | | | | |
| | | Elective | General Elective 2 | 4 | Elective | Advanced Eng. Elective | 4 | | | | | | |
| | | Elective | Advanced Science Elective | 4 | | | | | | | | | |
| Year 3 MD | CHME3000 | Prof. Issues in Eng'g. | 1 | ENGW3302 | Adv Writing in the Tech Prof (to be taken online) | 4 | Co-op | | | Elective | General Elective 3 | 4 | |
| | CHME3312 | Transport Processes 2 | 4 | Co-op | Co-op | Elective | | | | General Elective 4 | 4 | | |
| | CHME3313 | Lab for CHME3312 | 2 | | | | | | | | | | |
| | CHME3322 | ChE Thermodynamics 2 | 4 | | | | | | | | | | |
| | Elective | General Elective 2 | 4 | | | | | | | | | | |
| Elective | Advanced Science Elective | 4 | | | | | | | | | | | |
| Year 4 MC | Co-op | | | CHME4512 | ChE Process Control | 4 | | | | | | | |
| | | | | CHME4703 | Cpstn 2: Chem. Proc. Design | 4 | | | | | | | |
| | | | | CHME4510 | ChE Kinetics | 4 | | | | | | | |
| | | | | Elective | Advanced Science Elective | 4 | | | | | | | |
| Year 4 MD | BIOL1115 | Biology | 4 | CHME4512 | ChE Process Control | 4 | | | | | | | |
| | CHME4510 | ChE Kinetics | 4 | CHME4703 | Cpstn 2: Chem. Proc. Design | 4 | | | | | | | |
| | CHME4701 | Cpstn 1: Sep. & Proc. Anlys. | 4 | Elective | Adv. Eng'g. Elective | 4 | | | | | | | |
| | Elective | General Elective 5 | 4 | Elective | General Elective 6 | 4 | | | | | | | |

Revised 12/15/16

You will need to have AP credit for Calc. AB (MATH1341 - Calculus 1 - 4 SH) - see advisor

* [ENGW3315](#) is an acceptable substitution for engineering majors.

Electives may be interchanged. Please consult with your advisor in 220SN, 617-373-2154

NUpath Requirements through General Electives- Interpreting Culture (IC), Societies and Institutions (SI) and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements, and if these are not fulfilled in engineering courses, should use General Electives to do so. General Electives are academic, non-remedial, non-repetitive courses.

Advanced Science Elective Requirements: Students can choose between BIOL2301/02, BIOL2323/24, BIOL2327, BIOL3603, CHEM2321/22, CHEM2341/42, CHEM3403/04, CHEM4621/4622, CHEM4628/29, PHYS2303, PHYS3601. Students must meet all prerequisite requirements to enroll in these courses and enroll in co-requisite labs if applicable.

Advanced Engineering Elective Requirements: Must be 4000-5999 level engineering course; may be within CHME, CIVE, EECE, ME, IE, MEIE, ENGR. A faculty approved undergraduate research project can be substituted for this requirement. Research must be 4 Semester Hours and the Chemical Engineering Undergraduate Education Committee must approve project prior to registration. Proper registration form will be required; please see advisor for more details.

The registrar's website provides a listing of degree requirements and DARS provides a degree audit utility for students.