## COMBINED MAJOR IN CHEMICAL ENGINEERING AND PHYSICS
### BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING

*Sample Only – Actual Curriculum Sequence May Deviate from Sample*

### FALL | SPRING | SUMMER 1 | SUMMER 2
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**Year 1**
CHEM1151 | General Chem for Engrs. | 4 | CHEM1308 | ChE Conservation Princ. 4 | MATH2321 | Calculus 3 for Engrs. 4 | Vacation
CHEM1153 | Recitation for CHEM1151 | 0 | CHEM1302 | Cornerstone Eng’g 2 4 | PHYS1155 | Physics 2 for Engrs. 3 |
ENGW1111 | College Writing | 4 | MATH1342 | Calculus 2 for Engrs. 4 | PHYS1156 | Physics 2 Lab 1 |
GE1000 | Intro. to Eng’g. | 1 | PHYS1151 | Physics 1 for Engrs. 3 | PHYS1157 | ILS for PHYS1155 1 |
GE1101 | Cornerstone Eng’g 1 | 4 | PHYS1152 | Physics 1 Lab 1 | | |
MATH1141 | Calculus 1 for Engrs. 4 | 4 | PHYS1153 | ILS for PHYS1151 1 | |
**Year 2 AA**
CHEM2311 | Organic Chemistry 1 | 4 | CHEM2313 | Organic Chemistry 2 | 4 | Elective | General Elective (online | 4
CHEM2312 | Lab for CHEM2311 | 1 | CHEM2314 | Lab for CHEM2313 | 1 | course or adv. placement) | |
CHEM2319 | Recitation for CHEM2311 | 0 | CHEM2320 | Recitation for CHEM2313 | 0 | |
MATH2341 | Diff. Eq./Lin. Alg. | 4 | CHEM2010 | Intro to Eng’g. Co-op | 1 | |
CHME2320 | ChE Thermodynamics 1 | 4 | CHME2322 | ChE Thermodynamics 2 | 4 | Vacation | |
PHYS2371 | Electronics | 3 | PHYS2303 | Modern Physics | 4 | |
PHYS2372 | Electronics Lab | 1 | CHME2310 | Transport Processes 1 | 4 | |
**Year 3 AA**
* | Co-op | | | | | |
CHME3312 | Transport Processes 2 | 4 | PHYS3600 | Adv. Physics Laboratory | 4 | Co-op |
CHME3315 | ChE Eng’g. Exp. Design 1 | 4 | Elective | General Elective | 4 | |
ENGW3315* | Adv. Writing for Prof. | 4 | | | | |
PHYS3601** | Classical Dynamics | 4 | | | | |
**Year 4 AA**
* | Co-op | | | | | |
CHME4300 | Prof. Issues in Eng’g. | 1 | | | | |
CHME4315 | ChE Eng’g. Exp. Design 2 | 4 | | | |
CHME4510 | ChE Kinetics | 4 | | | |
CHME4701 | Cptsn 1: Sep. & Proc. Analys. | 4 | | | |
PHYS3602 | Electricity & Magnetism | 4 | | | |
**Year 5 AA**
* | Co-op | | | | | |
CHME4703 | Cptsn 2: Chem. Proc. Design | 4 | | | |
PHYS5115 | Quantum Mechanics | 4 | | | |
PHYS5318 | Adv. Phy. Lab 2 | 4 | | | |
Elective | Adv. Eng. Elective | 4 | | | |

* ENGW3302 is an acceptable substitution for engineering majors.

** PHYS 3601 Classical Dynamics is offered fall and spring semesters of even years only. Please meet with academic advisor to discuss scheduling options for Year 4 of odd years.

NPath Requirements: 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 General Electives to do so.

General Electives are academic, non-remedial, non-repetitive courses.

Advanced Engineering Elective Requirements: Must be 4000-5999 level engineering course; may be within BIOE, CHME, CIVE, ECE, 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.

Revised 3/19/18