

FIRST YEAR

FALL SEMESTER

GE A  4	WRIT 150 4	MATH 125 (GE F)  4	CHEM 105aL (GE E)  4	ENGR 102 2
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SPRING SEMESTER

CHE 120 (MATH 125, CHEM 105aL) 3	CHE 205 (MATH 125) 3	MATH 126 or MATH 129 (MATH 125)  4	CHEM 105bL (CHEM 105aL) 4	PHYS 151L (GE E) (MATH 125 or 126 or 226) 4
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SECOND YEAR

FALL SEMESTER

CHE 330 (MATH 226) 3	CHEM 300L (CHEM 105bL) 4	MATH 226 or MATH 229 (MATH 126 or MATH 129) 4	PHYS 152L (PHYS 151L, (MATH 226)) 4	OPTIONAL ELECTIVE 3
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SPRING SEMESTER

GE B 4	CHEM 322aL (CHEM 105bL) 4	MATH 245 (MATH 226 or MATH 229) 4	APPROVED ELECTIVE 2-3	CHE 350 (CHEM 105bL) 3
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THIRD YEAR

FALL SEMESTER

GEC 4	TECHNICAL ELECTIVE 3	CHEM 430 (CHEM 300L or 322aL, MATH 226, PHYS 151L) 4	CHE 405 (MATH 245) 3	CHE 442 (MATH 245) 3	OPTIONAL ELECTIVE 1
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SPRING SEMESTER

GE B 4	CHE 444aL (CHE 330, 350, 442, (443)) 3	APPROVED ELECTIVE 2-3	CHE 443 (CHE 350, MATH 245) 3	CHE 476 (CHEM 322aL) 3	OPTIONAL ELECTIVE 1-2
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FOURTH YEAR

FALL SEMESTER

GE D  4	CHE 444bL (CHE 350, CHE 443) 3	CHE 445 (CHE 443, MATH 245) 2	CHE 485 (CHE 442, 443) 3	APPROVED ELECTIVE 2-3	WRIT 340 (WRIT 150) 3
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SPRING SEMESTER

GEC 4	CHE 446 (CHE 443, 445, MATH 245) 2	CHE 460L (CHE 120, (MATH 245)) 3	CHE 480 3	CHEMISTRY ELECTIVE 4	OPTIONAL ELECTIVE 2
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MATHEMATICS (16 UNITS)

MATH 125: Calculus I
MATH 126 or **MATH 129:** Calculus II
MATH 226 or **MATH 229:** Calculus III
MATH 245: Mathematics of Phys. and Engr.

PHYSICS (8 UNITS)

PHYS 151L: Mechanics and Thermodynamics
PHYS 152L: Electricity and Magnetism

CHEMISTRY (24 UNITS)

CHEM 105AL: General Chemistry
CHEM 105BL: General Chemistry
CHEM 300L: Analytical Chemistry
CHEM 322AL: Organic Chemistry
CHEM 430: Physical Chemistry: Thermodynamics & Kinetics
CHEMISTRY ELECTIVE: CHEM 322bL or 431

GENERAL EDUCATION (32 UNITS)

GE A The Arts (1 Course)
GE B Humanistic Inquiry (2 Courses)
GE C Social Analysis (2 Courses)
GE D Life Sciences (1 Course)
GE E Physical Sciences (1 Course)
GE F Quantitative Reasoning (1 Course)
GE G,H Global Perspectives (2 Courses)*
GESM General Education Seminar (1 Course)*


WRITING (7 UNITS)

WRIT 150: Writing and Critical Reasoning
WRIT 340: Advanced Writing

ENGINEERING (54-57 UNITS)

CHE 120: Intro. to Chemical Engineering
CHE 205: Numerical Methods in Chemical Engineering
CHE 330: Chemical Engr. Thermodynamics
CHE 350: Intro. to Separation Processes
CHE 405: Probability and Statistics for CHE
CHE 442: Chemical Reactor Analysis
CHE 443: Viscous Flow
CHE 444AL: Chemical Engineering Lab
CHE 444BL: Chemical Engineering Lab
CHE 445: Heat Transfer in ChE Processes
CHE 446: Mass Transfer in ChE Processes
CHE 460L: Chem. Proc. Dynamics & Control
CHE 476: Chemical Engineering Materials
CHE 480: Chem. Process and Plant Design
CHE 485: Computer Aided Process Design
ENGR 102: Engineering Freshman Academy
TECHNICAL ELECTIVE
APPROVED ELECTIVES

* SPECIAL NOTES

 Courses with this symbol may be satisfied with AP, IB or A-Level exams. See page 17 for more information.

GE: Engineering students are encouraged to satisfy GE G and GE H with a course that also satisfies a Core Literacy. GE H may be satisfied by exam. Additionally, your GESM course should be taken in categories A, B, C, or D only. See pp. 16-17 for more information and consult your advisor for detailed assistance.

OPTIONAL ELECTIVES: Consult with your academic advisor to explore optional elective courses. These courses are not required.

TECHNICAL ELECTIVE: Any upper-division CHE course that is not already required.

APPROVED ELECTIVES: 8-9 units of approved electives including CE 205 (2), EE 438L (3), and ISE 460 (3) or BUAD 301 (3) or other courses with department approval.