

Environmental Engineering

FIRST YEAR		SECOND YEAR		THIRD YEAR		FOURTH YEAR	
FALL	SPRING	FALL	SPRING	FALL	SPRING	FALL	SPRING
CHEM 105aL (GE E)* 4	GESM (GE B)# 4	ENE 215 PHYS 151Lg 4	CE 330 CE 119 2	CHE 330 (MATH 226) 4	ENE 428 MATH 245, PHYS 151, CHEM 105b 4	GE B 4	ADVANCED COMPUTING ELECTIVE 4
WRIT 150 4	GE A* 4	MATH 245 MATH 226 or 229 4	ENE 200 CHEM 105aL, PHYS 151L, MATH 126, (CHEM 105bL) 4	CE 408 (MATH 245) 2	ENE 300 ENE 410 or CE 309, MATH 245, PHYS 151Lg 4	CE 410L BISC 220, CHEM 105bL or 115bL 4	ENE 426 4
MATH 126 (GE F)* MATH 125 4	MATH 226 OR MATH 229 MATH 126 or 129 4	PHYS 152L PHYS 151L, (MATH 226) 4	CE 309 MATH 226 (CE 225) 4	GE C OR ENE 415 4	CE 451 ENE 410 or CE 309 4	GE C OR ENE 415 4	CE 480 CE 408 and either CE 456, 457, 476 or 485 4
CE 110 2	PHYS 151L (GE E) MATH 125 or 126 or 226 4	CE 119 (MATH 245) 2	BISC 220L (GE D)* 4	WRIT 340 WRIT 150 4	CE 363L ENE 200, CHEM 105aL 4	CE 485 CE 453, CE 363L 4	OPTIONAL ELECTIVE 4
ENGR 102 2	CE 108 2	CE 215 PHYS 151Lg 4	GE B 4	ENE DESIGN ELECTIVE 4	CE 483 CE 215 2	OPTIONAL ELECTIVE 2	OPTIONAL ELECTIVE 2
OPTIONAL ELECTIVE 2							

MATHEMATICS (12 UNITS)

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 (8 UNITS)

CHEM 105aL: General Chemistry*

CHEM 105bL: General Chemistry

OTHER SCIENCE (4 UNITS)

BISC 220L: Cell Biology and Physiology*

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 (8 UNITS)

WRIT 150: Writing and Critical Reasoning

WRIT 340: Advanced Writing

ENGINEERING (UNITS)

CHE 330: Chemical Engineering Thermodynamics

CE 108: Intro. to CE Computer Methods

CE 110: Intro. to Environmental Engineering

CE 119: Probability Concepts and Civil Engineering

CE 215: Statics and Dynamics

CE 309: Fluid Mechanics

CE 330: Computational Methods in Engineering

CE 363L: Water Chemistry and Analysis

CE 408: Risk & Decision Analysis in Civil ENGR

CE 410L: Introduction to Environmental

Engineering Microbiology

CE 408: Risk & Decision Analysis in Civil ENGR

CE 423: Principles of Autonomy in Civil Engr

CE 450: Coastal Engineering & Design

CE 451: Water Resources Coastal Engineering

CE 480: Civil & Environmental ENGR Capstone

Design

CE 483: Engineering Economics in Civil Engineering

CE 485: Wastewater Treatment Design

CHE 330: Chemical Engr. Thermodynamics

ENE 200: Environmental Engr. Principles

ENE 215: Energy Systems & Environmental

Tradeoffs

ENE 300: Contaminant Transport in the Environment

ENE 400: Quantitative Sustainability

ENE 410: Environmental Fluid Mechanics

ENE 415: Environmental Organic Chemistry

ENE 426: Particulate Air Pollutants: Properties

Behavior/ Measurement

ENE 428: Air Pollution Fundamentals

ENE 440: Machine Learning for Climate Change and Sustainability

ENGR 102: Engineering Freshman Academy

SPECIAL NOTES

Courses with the * symbol may be satisfied with AP, IB or A-Level exams. See page 18 for more information.

GESM#: GESM can be taken from GE categories: A, B, C, or D. Courses listed in the guide are options for a four-year course plan.

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 AP/IB. Additionally, your GESM course should be taken in categories A, B, C, or D only. See page 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.

CE 309: Minimum grade of "C" is required.

MATH 125: For students starting with Calculus 1, ENGR 102 will be waived for your requirements.

DESIGN ELECTIVES: CE 450, CE 476, or ENE 400.

ADVANCED COMPUTING ELECTIVES: CE 423 OR ENE 440.