

Student Name:

Updated:

Updated By:

B.S. in ENVIRONMENTAL ENGINEERING
Suggested 4-Year Academic Flowchart

This document displays only your course requirements
at the time of publication of the catalog.
You must use your Degree Progress Report
to track all your graduation requirements.

2022-2026 Catalog

Updated 5/16/2022

FRESHMAN			SOPHOMORE			JUNIOR			SENIOR			
Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring	
<div>Intro. to the Environmental Engineering Profession</div> <div>ENVE 111 (1)</div>	<div>Computer Aided Drafting in Civil Engineering</div> <div>CE 113 (2)</div>		<div>Air Quality Engineering</div> <div>ENVE 325 (4)</div> <div>(CHEM 125 or 128)</div>	<div>Noise & Vibration Control</div> <div>ENVE 309 (3)</div> <div>(MATH 241; PHYS 142)</div>		<div>Environmental Fluid Mechanics</div> <div>ENVE 264 (4)</div> <div>(MATH 241; PHYS 142; ME 211)</div>	<div>Water Chemistry & Water Quality Measurements</div> <div>ENVE 434 (4)</div> <div>(CHEM 125 or 129; ENVE 330 or 331)</div>	<div>Mass Transfer Operations</div> <div>ENVE 421 (4)</div> <div>(ENVE 325; 331; 304 or ME 302; ENVE 264 or ME 341)</div>	<div>Civil Engineering Professional Practice</div> <div>CE 465 (1)</div> <div>(Sr Standing and Instr. Consent)</div>	<div>Senior Project Design Laboratory I & II</div> <div>ENVE 466 (2)</div> <div>(ENVE 438; CE 336; Sr Standing; CE 465†)</div> <div>ENVE 467 (2)</div> <div>(ENVE 466)</div>		
	<div>General Physics I</div> <div>PHYS 141 (4)</div> <div>(MATH 141 w/min C-; MATH 142† or 182†)</div> <div>[Area B Elective]</div>	<div>General Physics II</div> <div>PHYS 142 (4)</div> <div>(PHYS 141; MATH 142 or 182)</div>	<div>General Physics III</div> <div>PHYS 143 (4)</div> <div>(PHYS 141; MATH 142; Recom: MATH 241)</div>	<div>Mechanics of Materials I</div> <div>CE 204 (3)¹</div> <div>(ME 211)</div>	<div>Mechanics of Materials II</div> <div>CE 207 (2)¹</div> <div>(CE 204)</div>	<div>Programming Applications in Engineering</div> <div>CE 251 (2)</div> <div>(CE 113; MATH 244; CE 204 or CE 208†)</div>	<div>Process Thermodynamics</div> <div>ENVE 304 (3)</div> <div>(CHEM 125 or 129; ENVE 331)</div>	<div>Water & Wastewater Treatment Design</div> <div>ENVE 438 (3)</div> <div>(ENVE 331 and ME 341 or ENVE 264)</div>	<div>Choose 12 units from the following:</div> <div>Air Pollution Control</div> <div>ENVE 411 (4)*</div> <div>Envir Engineering of Energy</div> <div>ENVE 480 (4)*</div> <div>Sustainable Solid Waste Eng</div> <div>ENVE 439 (4)*</div> <div>Envir Health & Safety</div> <div>ENVE 455 (4)*</div> <div>Intro Haz Waste Mgmt</div> <div>ENVE 436 (4)*</div> <div>Bioremediation Eng</div> <div>ENVE 443 (4)*</div>			
<div>Calculus I</div> <div>MATH 141 (4)</div> <div>*</div> <div>[B4]</div>	<div>Calculus II</div> <div>MATH 142 (4)</div> <div>(MATH 141 w/min C- or Instr. Consent)</div> <div>[B4]</div>	<div>Calculus III</div> <div>MATH 143 (4)</div> <div>(MATH 142 w/min C- or Instr. Consent)</div> <div>[Area B Elective]</div>	<div>Calculus IV</div> <div>MATH 241 (4)</div> <div>(MATH 143)</div>	<div>Fundamentals of Env. Engineering</div> <div>ENVE 331 (4)</div> <div>(CHEM 125 or 128; MATH 242 or 244†)</div> <div>Choose one:</div> <div>MCRO 221 (4)* or MCRO 224 (5)*</div> <div>[B2]</div>		<div>Statistical Methods for Engineers</div> <div>STAT 312 (4)</div> <div>*</div> <div>[Upper-Div B]</div>	<div>Water Resources Engineering</div> <div>CE 336 (4)</div> <div>(ME 341 or ENVE 264; CE 337†)</div> <div>Hydraulics Laboratory</div> <div>CE 337 (1)</div> <div>(ENVE 264 or ME 341; CE 336†)</div>		<div>Industrial Pollution Prevention</div> <div>ENVE 450 (4)</div> <div>(ENVE 331)</div>	<div>Groundwater Hydraulics and Hydrology</div> <div>CE 434 (4)</div> <div>(CE 336)</div>		
<div>General Chemistry for Physical Science & Engineering I</div> <div>CHEM 124 (4)</div> <div>*</div> <div>[B1 & B3]</div>	<div>General Chemistry for Physical Science & Engineering II</div> <div>CHEM 125 (4)</div> <div>(CHEM 124, or AP Chemistry score of 5)</div>	<div>General Chemistry for Physical Science & Engineering III</div> <div>CHEM 126 (4)</div> <div>(CHEM 125 w/min C- or Instr. Consent)</div>	<div>Engineering Statics</div> <div>ME 211 (3)</div> <div>(MATH 241†; PHYS 131 or 141)</div>	<div>Linear Analysis I</div> <div>MATH 244 (4)</div> <div>(MATH 143)</div>	<div>Survey of Organic Chemistry</div> <div>CHEM 312 (5)</div> <div>(CHEM 125 or 128)</div>		<div>Geotechnical Engineering</div> <div>CE 381 (4)</div> <div>(CE 207 or 208; ME 341 or ENVE 264)</div> <div>Air Quality Measurements</div> <div>ENVE 426 (3)</div> <div>(ENVE 325; CHEM 212/312; ENVE 264 or ME 341; STAT 312)</div>		<div>Approved Technical Elective</div> <div>(2)²</div> <div>***</div>	<div>Approved Technical Elective</div> <div>(4)²</div> <div>***</div>	<div>Approved Technical Elective</div> <div>(4)²</div> <div>***</div>	
<div>Oral Communication</div> <div>COMS 101/102 (4)**</div> <div>[A1]</div>												
<div>Expository Writing</div> <div>ENGL 133/134 (4)**</div> <div>[A2]</div>												
<div>Reasoning, Argumentation, & Writing [A3]</div> <div>COMS 126, 145, ENGL 145, 147, ES 145, PHIL 126, or WGQS 145 (4)**</div> <div>(Completion of GE A2 with a C- or better)</div> <div>Can be taken anytime between Winter of Freshman and Winter of Sophomore Years.</div>							<div>Graduation Writing Requirement GWR*</div> <div>(Students can attempt to fulfill the requirement after 90 earned units; students should complete the requirement before senior year)</div>					
13	18	16	15	18	15-16	14	16	18	15	18	14	
										TOTAL:		190-191

Notes:**MOST GENERAL EDUCATION COURSES CAN BE TAKEN IN ANY ORDER AS LONG AS PREREQUISITES ARE MET**

* Refer to current catalog for prerequisites.

** One course from each of the following GE areas must be completed: A1, A2, A3, C1, C2, Lower-Division C Elective, Upper-Division C, D1, Area D Elective, Lower-Division E, and F. Upper-Division C should be taken only after Junior standing is reached (90 units).

Refer to online catalog for GE course selection, United States Cultural Pluralism (USCP) and Graduation Writing Requirement (GWR).

USCP requirement can be satisfied by some (but not all) courses within GE categories: C1, Upper-Division C, D1, D2, Upper-Division D, or E.

*** To be selected in consultation with your academic advisor.

† Course can be taken previously or concurrently.

¹ Transfer students take CE 208 (5) in the Fall Quarter in place of both CE 204 (3) and CE 207 (2).² 10 units Technical Electives. See catalog for course options. Consult advisor.**Legend:**

Course Title	
Course # (Units)	
(Prerequisite)	
[GE Area]	

Major (86)

Support (60-61)

General Ed. (44)