

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

Updated 7/8/2019

FRESHMAN			SOPHOMORE			JUNIOR			SENIOR		
Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring
Intro. to the Environmental Engineering Profession ENVE 111 (1)	Computer Aided Drafting in Civil Engineering CE 113 (2)		Engineering Statics ME 211 (3) <small>MATH 241†, PHYS 131 or 141</small>	Noise & Vibration Control ENVE 309 (3) <small>(MATH 241 and PHYS 132; ENGL 149†)</small>	Air Quality Engineering ENVE 325 (4) <small>(CHEM 125 or 128)</small>	Environmental Fluid Mechanics ENVE 264 (4) <small>(MATH 241; PHYS 132; ME 211)</small>	Water Chemistry & Water Quality Measurements ENVE 434 (4) <small>(CHEM 125 or 129; ENVE 330 or 331)</small>	Mass Transfer Operations ENVE 421 (4) <small>ENVE 325; 331; 304 or ME 302; ENVE 264 or ME 341</small>	Groundwater Hydraulics and Hydrology CE 434 (4) <small>(CE 336)</small>		Industrial Pollution Prevention ENVE 450 (4) <small>(ENVE 331)</small>
	General Physics IA PHYS 141 (4) <small>(MATH 141 w/min C-; MATH 142† or 182†) [Add'l Area B]</small>	General Physics II PHYS 132 (4) <small>(PHYS 131 or HNRS 131 or PHYS 141)</small>	General Physics III PHYS 133 (4) <small>(PHYS 131 or HNRS 131 or PHYS 141, and MATH 142, Recom: MATH 241)</small>	Mechanics of Materials I CE 204 (3) <small>(ME 211)</small>	Mechanics of Materials II CE 207 (2) <small>(CE 204)</small>	Programming Applications in Engineering CE 251 (2) <small>(CE 113; MATH 244; CE 204 or CE 208†)</small>	Process Thermodynamics ENVE 304 (3) <small>(CHEM 125 or 129; ENVE 331)</small>	Water & Wastewater Treatment Design ENVE 438 (3) <small>(ENVE 331 and ME 341 or ENVE 264)</small>	Choose 12 units from the following: ENVE 411 (4)* Air Pollution Control Waste Eng OR ENVE 439 (4)* Sustainable Solid Waste Eng OR ENVE 480 (4)* Envir Engineering of Energy OR ENVE 436 (4)* Intro Haz Waste Mgmt ENVE 455 (4)* Envir Health & Safety OR ENVE 443 (4)* Bioremediation Eng		
Calculus I MATH 141 (4) * [B1]	Calculus II MATH 142 (4) <small>(MATH 141 w/min C-)</small> [B1]	Calculus III MATH 143 (4) <small>(MATH 142 w/min C-)</small> [Add'l Area B]	Calculus IV MATH 241 (4) <small>(MATH 143)</small>	Fundamentals of Env. Engineering ENVE 331 (4) <small>(CHEM 125 or 128; MATH 242 or 244†)</small>		Statistical Methods for Engineers STAT 312 (4) <small>(MATH 142)</small> [B6]	Water Resources Engineering CE 337 (4) <small>(ME 341 or ENVE 331; CE 337†)</small>	Senior Project Design Laboratory I & II ENVE 466 (2) <small>(ENVE 438; CE 336; Sr Standing; CE 465†)</small>	ENVE 467 (2) <small>(ENVE 466)</small>		Approved Technical Elective (4)¹ ***
General Chemistry for Physical Science & Engineering I CHEM 124 (4) * [B3/B4]	General Chemistry for Physical Science & Engineering II CHEM 125 (4) <small>(CHEM 124, or AP Chemistry score of 5)</small>	General Chemistry for Physical Science & Engineering III CHEM 126 (4) <small>(CHEM 125 w/min C-)</small>	Survey of Organic Chemistry CHEM 312 (5) <small>(CHEM 125 or 128)</small>	Linear Analysis I MATH 244 (4) <small>(MATH 143)</small>			Hydraulics Laboratory CE 338 (1) <small>(ENVE 264 or ME 341; CE 336†)</small>	Geotechnical Engineering CE 381 (4) <small>(CE 207 or 208; ME 341 or ENVE 264)</small>	Civil Engineering Professional Practice CE 465 (1) <small>(Sr Standing and Instr. consent)</small>	Approved Technical Elective (4)¹ ***	
Expository Writing ENGL 133/134 (4)** [A1]								Air Quality Measurements ENVE 426 (3) <small>(ENVE 325; CHEM 125 or 129; ENVE 264 or ME 341; STAT 312; ENGL 149)</small>	Approved Technical Elective (2)¹ ***		
Oral Communication COMS 101/102 (4)** [A2]				GE (4) **	GE (4) **	GE (4) **	GE (4) **	GE (4) **	GE (4) **	GE (4) **	
Technical Writing for Engineers ENGL 149 (4) <small>(Completion of GE A1 with a C- or better recommended; Completion of GE A2) Can be taken anytime between Winter of Freshman and Winter of Sophomore Years</small>									GE (4) **		
13	18	16	16	18	15	14	16	18	17	14	16
										TOTAL: 190-191	

Fall:
CEA Madrid, Spain
CEA Paris, France

Fall:
CEA Madrid, Spain
Swinburne, Australia

Spring:
Munich, Germany

Fall - Spring:
CSU IP Queretaro, Mexico

Summer:
CEA Barcelona, Spain
Cal Poly Affiliated Programs

Summer:
CEA Barcelona, Spain
Cal Poly Affiliated Programs

Summer:
Munich, Germany
TECNUN, Spain

* Please visit the International Center to learn about Cal Poly Affiliated Programs and the types of courses that can be taken abroad. Also meet with IEP advisor & Dept. faculty advisor to discuss options for study abroad.