

Recommended course plan for BSE students graduating in 2023 and interested in careers in
ENVIRONMENTAL HEALTH ENGINEERING
 (128 credits)

Fall 1st Year 16 cr.	Chem 1035 (3) General Chemistry ⁵	Chem 1045 (1) General Chemistry Lab ⁵	MATH 1225 (4) Calculus for Science ⁵	ENGE 1215 (2) Foundations of Engineering	ENGL 1105 (3) First-Year Writing ⁵	Pathways (3)
Spring 1st Year 16 cr.	CHEM 1036 (3) General Chemistry ⁵ Pre: CHEM 1035 Spring, Summer	ENGL 1106 (3) Freshman English ⁵ Pre: ENGL 1105	PHYS 2305 (4) Found of Physics ⁵ Pre: MATH 1225 Co: MATH 1226	MATH 1226 (4) Calculus for Science ⁵ Pre: MATH 1225	ENGE 1216 (2) Exploration of Engineering Design Pre: ENGE 1215	
Fall 2nd Year 17 cr.	CHEM 2514 (3) Survey of Org Chem ^{2,4} Pre: CHEM 1035, 1036, 1045 Fall, Spring, Summer	MATH 2114 (3) Intro to Linear Algebra Pre: Math 1225 (min. grade B) or MATH 1226 (min. grade P)	MATH 2204 (3) Multivariable Calculus Pre: Math 1226 (min. grade P)	ESM 2104 (3) Statics Pre: MATH 1226 (min. grade P)	BIOL 1105 (3) Principles of Biology Fall, Summer	BSE 2004 (2) Intro to BSE Pre: ENGE 1215 Fall, Spring
Spring 2nd Year 15 cr.	MATH 2214 (3) Differential Equations Pre: MATH 2114 & 1226	ESM 2304 (3) Dynamics Pre: ESM 2104, MATH 2204 Co: MATH 2214	BIOL 1106 (3) Principles Biology Spring, Summer	BSE 3144 (2) Engineering Analysis for Biological Systems Co: MATH 2214 Spring Only		PHYS 2306 (4) Foundations of Physics ⁵ Pre: MATH 1226, PHYS 2305
Fall 3rd Year 15 cr.	ESM 3024 (3) Intro Fluid Mechanics Pre: ESM 2304 Fall Only	BSE 3154 (3) Thermodynamics of Biological Systems Pre: MATH 2204, ESM 2304 Co: ESM 3024 Fall Only	BSE 3134 (1) BSE Seminar Pre: BSE 2004 Fall Only	BSE 3324 (3) Small Watershed Hydrology ¹ Co: ESM 3024 Fall Only	STAT 3704 (2) Statistics for Engineering Applications Pre: MATH 2204	Pathways (3)
Spring 3rd Year 18 cr.	BIOL 2604 (3) General Microbiology Pre: BIOL 1105, 1106, CHEM 1035, 1036	BSE 3504 (3) Transport Processes BSE Pre: BSE 3154, ESM 3024 Spring Only	BSE 3334 (3) NPS Assessment & Control ¹ Pre: BSE 3324 Spring Only	CEE 3104 (3) Intro Environmental Engineering ^{3,4} Pre: PHYS 2305, MATH 1226, CHEM 1035 & 1045 Fall, Spring	Pathways (3)	BSE 4344 (3) GIS for Engineers ^{1, 3, 4} Pre: BSE 3324 Spring Only
Fall 4th Year 16 cr.	ISE 2014 (2) Engineering Economy	BSE 4125 (2) Comprehensive Design Project ⁵ Pre: BSE 3334 Fall Only		CEE 4104 (3) Water & Wastewater ^{3,4} Pre: CEE 3104, CEE 3304 (will take ESM 3024 also) Fall Only	Pathways (3)	Pathways (3)
Spring 4th Year 15 cr.	BSE 4126 (3) Comprehensive Design Project ⁵ Pre: BSE 4125 Spring Only		BIOL/CEE/CSSES/ENSC 4164 (3) Environmental Microbiology ⁴ Pre: BIOL 2604 Spring Only	CEE 4114 (3) Fundamentals of Public Health Engineering ^{3,4} Pre: CEE 3104 Spring Only	BSE 4304 (3) Intro to Watershed Modeling ¹ Pre: BSE 3334 Spring Only	CSSES/ENSC 4314 (3) ^{2, 4} Water Quality Pre: MATH 1226, BIOL 1105, CHEM 1035 Spring Only

¹ BSE Elective; ² Chemistry Elective; ³ Engineering Elective; ⁴ Technical Elective; ⁵ Pathways

Other technical elective option: BSE 4394