

Recommended course plan for BSE students graduating in 2019 and interested in careers in
ENVIRONMENTAL HEALTH ENGINEERING
 (132 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	CLE (3)
Spring 1st Year 17 cr.	CHEM 1036 (3) General Chem ⁵ Pre: CHEM 1035 Spring, Summer 1 & 2	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	CLE (1)
Fall 2nd Year 17 cr.	CHEM 2514 (3) Survey of Org Chem ^{2,4} Pre: CHEM 1036 Fall, Summer 1	MATH 2114 (3) Intro to Linear Algebra	MATH 2204 or 2224 (3) Multivariable Calculus Pre: Math 1225 & 1226 (Old sequence: 1205 & 1206)	ESM 2104 (3) Statics Co: MATH 2114, MATH 2224	BIOL 1105 (3) Principles of Biology ⁵ Fall, Summer 1	BSE 2004 (2) Intro to BSE Pre: ENGE 1215 Fall, Spring
Spring 2nd Year 18 cr.	MATH 2214 (3) Differential Equations Pre: MATH 2114 & 1226 (Old sequence: 1206)	ESM 2304 (3) Dynamics Pre: ESM 2104, MATH 2224 Co: MATH 2214	BIOL 1106 (3) Principles Biology ⁵ Spring, Summer 2	BSE 3144 (2) Eng Analysis for Bio Sys Co: MATH 2214 Spring Only	PHYS 2306 (4) Foundations of Physics ⁵ Pre: MATH 1225, PHYS 2305	CEE 3104 (3) Intro Environmental Engineering ^{3,4,5} Pre: PHYS 2305, MATH 1226, CHEM 1035 & 1045 Fall, Spring
Fall 3rd Year 15 cr.	ESM 3024 (3) Intro Fluid Mechanics Pre: ESM 2304, MATH 2224 Fall, Summer 2, Winter	BSE 3154 (3) Thermo of Bio Systems Pre: MATH 2204/2224, ESM 2304 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 2224/2204	CLE (3)
Spring 3rd Year 16 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	BSE 4344 (3) GIS for Engineers ¹ Spring Only	BIOL 2614 (1) General Micro Lab ⁴ Fall, Spring, Summer 1	CS/ES/ENSC 4314 (3) ^{2,4} Water Quality Pre: MATH 1226, BIOL 1105, CHEM 1035 Spring Only
Fall 4th Year 18 cr.	ISE 2014 (2) Engineering Economy Pre: ENGE 1215	BSE 4125 (2) Comprehensive Design Project Pre: BSE 3334 or 3524 Fall Only	BSE 4204 (3) Instrumentation for Biosystems Pre: PHYS 2306, ESM 3024 Fall Only	Technical Elective (2)	CEE 4104 (3) Water & Wastewater Trtmt Design ^{3,4} Pre: CEE 3104 (C- or better), Fluids Fall & Spring	CLE (6)
Spring 4th Year 15 cr.	BSE 4126 (3) Comprehensive Design Project Pre: BSE 4125 Spring Only	BIOL/CEE/CS/ES/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) NPS Modeling & Mgmt ¹ Pre: BSE 3334 Spring Only	CLE (3)	

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

Other options: BSE 4394 ⁴ & PPWS 4114 ⁴