

Recommended course plan for BSE students graduating in 2022 and interested in careers in
ENVIRONMENTAL HEALTH ENGINEERING
 (128 credits)

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|---------------------------------------|--|--|---|---|--|---|
| 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 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 | |
| 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 Pre: Math 1225 (min. grade B) or MATH 1226 (min. grade P) | MATH 2204 (3) Multivariable Calculus Pre: Math 1225 & 1226 | ESM 2104 (3) Statics Co: MATH 2204 | BIOL 1105 (3) Principles of Biology Fall, Summer 1 | 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 2 | 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, MATH 2204 Fall, Summer 2, Winter | 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 Pre: ENGE 1215 | 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) | Pathways (3) |
| Spring 4th Year 15 cr. | BSE 4126 (3) Comprehensive Design Project ⁵ Pre: BSE 4125 Spring Only | BIOL/CEE/CSES/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 | CSES/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

Last updated August 30, 2019