

BSE-EH Notes

(a) Biology, Chemistry or Physics Elective

Select From:

BIO 14, CHEM 2, PHY 12

(b) Natural Science Elective

Pre-Health Professions (PHP) students are required to take BIO 14, CHEM 2, and PHY 12, and thus should select one of these three courses.

Select From:

Any course having attribute SOE-Natural Sciences

(c) Humanities Elective

At least 3 SHU of Humanities are required. Requirement may not be satisfied with pre-matriculation credits, ENG 1, or ENG 3.

Select From:

Any course having attribute SOE-HASS-Humanities

(d) Social Sciences Elective

At least 3 SHU of Social Sciences are required. Requirement may not be satisfied with pre-matriculation credits.

Select From:

Any course having attribute SOE-HASS-Social Sciences

(e) Humanities, Arts or Social Sciences Electives

Select From:

Any course having attribute SOE-HASS

Any course having attribute SOE-HASS-Humanities

Any course having attribute SOE-HASS-Arts

Any course having attribute SOE-HASS-Social Sciences

(f) Track Electives

At least 20 SHUs selected in consultation with your advisor. Students not following one of the four recommended tracks are required to include at least 6 SHU having attribute SOE-Engineering or SOE-Computing. Selected courses may not be used to fulfill any other course requirement.

Recommended tracks:

Global Health

ANTH 10 Intro. Soc. Anthro.

CEE 34 Environ. Chem.

CEE 150 Field Meth. Global Health

CEE 159 WASH Design

CH 1 Intro. Community Health

CH 108 Epidemics

Any course in Peace & Justice Stud.

Health Data Analysis

ES 55 Numerical Methods

CEE 80 Integ. Plan. Mgt.

CEE 151 GCC & Human Health

CEE 152 Environ. Health Data Lab

COMP 15 Data Structures

COMP 40 Mach. Struc. Prog.

Risk Assessment

ES 25 Environment & Technology

UEP 94 Env. Policy, Plan. & Politics

CEE 39 Intro. Haz. Mat. Mgt.

CEE 153 Health Eff. & Risk Assmt.

CEE 157 Environ. Toxicology

CEE 158 Occup. & Environ. Health

CEE 133 Water & Wastewater Dsn.

or CEE 143 Site Remediation

or CEE 138 Haz. Waste Treat. Tech.

Pre-Health Professional

complete BIO14, CHEM 2, PHY 12

CHEM 51 & CHEM 53 Organic Chem.

CH 2 Health Care in America

CH 106 Health, Ethics & Policy

BIO 152 Biochem & Cellular Met.

or CHEM 171 Biochemistry I

(g) Program Electives

At least 9 SHUs of coursework approved by your advisor. Approval is based on establishing a coherent rationale for the set of selected electives. Students pursuing the Pre-Health Professional track must include at least 3 SHU having attribute SOE-Engineering or SOE-Computing.

BSE-EH Course Selection Guidance

Fall Semester, First Year

Course	SHU	SOE Attribute
<i>EN 1 Introduction to Engineering</i>	3	Engineering
MATH 32 Calculus I	3	Mathematics
CHEM 1 Chemical Fundamentals with laboratory	5	Natural Sciences
<i>ENG 1 Expository Writing</i>	3	HASS

Semester Total SHU 14

Spring Semester, First Year

Course	SHU	SOE Attribute
<i>COMP 11 Introduction to Computer Science</i>	4	Computing
MATH 34 Calculus II	3	Mathematics
PHY 11 General Physics I with laboratory	5	Natural Sciences
EC 8 Principles of Economics w/ Environmental Applications	3	HASS

Semester Total SHU 15

Fall Semester, Second Year

Course	SHU	SOE Attribute
CEE 32 Engineering for a Sustainable & Resilient Society	3	Engineering
CEE 57 Public Health	3	Engineering
MATH 42 Calculus III	4	Mathematics
BIO 13 Cells & Organisms with laboratory	5	Natural Sciences
EC 30 Environmental Economics	3	HASS

Semester Total SHU 18

Spring Semester, Second Year

Course	SHU	SOE Attribute
CEE 52 Public Health Engineering	3	Engineering
CEE 156 Biostatistics	4	Mathematics
BIO-CHEM-PHY Elective	5	Natural Sciences
MATH 51 Differential Equations	4	Mathematics
<i>HASS or Program Elective</i>	3-5	varies with selection

Semester Total SHU 19-21

Fall Semester, Third Year

Course	SHU	SOE Attribute
CEE 154 Principles of Epidemiology	3	Engineering
CEE 187 GIS	3	Engineering
ES 8 Fluid Mechanics	3	Engineering
Natural Science Elective	3-5	Natural Sciences
<i>HASS or Program Elective</i>	3-5	varies with selection

Semester Total SHU 15-19

Spring Semester, Third Year

Course	SHU	SOE Attribute
Track Electives	9-15	varies with selection
<i>HASS or Program Electives</i>	6-10	varies with selection

Semester Total SHU 15-21

Fall Semester, Fourth Year

Course	SHU	SOE Attribute
Track Electives	9-15	varies with selection
<i>HASS or Program Electives</i>	6-10	varies with selection

Semester Total SHU 15-21

Spring Semester, Fourth Year

Course	SHU	SOE Attribute
CEE 94 Independent Study	3	Engineering
Track Elective	3-5	varies with selection
<i>HASS or Program Elective</i>	6-10	varies with selection

Semester Total SHU 12-18