

Integrative Engineering – Environment & Energy Focus Typical Four-year Schedule

First Year:

Fall

ES 101 Intro to Eng
MATH 161 Calculus I
CHEM 107 General Chemistry I (L)
First Year Seminar

Spring

ES 103 Systems I
MATH 162 Calculus II
PHYS 131/151 Physics I / Acc. Physics (L)
CHEM 108 General Chemistry II/Elective

Second Year:

Fall

ES 201 Systems II (L)
MATH 263 Calculus III
ES 231 Materials/Elective
CS 104 or 105
CHEM 108 General Chemistry II /Elective*

Spring/Study Abroad**

CS 104, 105, or 106/Elective
MATH 264 DEQs with Linear Algebra
ES 231 Materials/Elective
Elective
Elective

Third Year:

Fall

CE 321 Env Eng & Sci (L)
CE 251 Fluids/ChE 311 Transport
or M, S, Eng Elective (see list)
ES 254 Thermodynamics
Engineering or Related Elective (see list)
EGRS 251 Intro to Eng Public Policy

Spring

ES 303 Environment & Energy Systems
ME 362 Fluids***/M, S, Eng Elective (see list)
EGRS 352 Energy, Techn & Modern World
Engineering or Related Elective (see list)
Elective

Fourth Year:

Fall

Capstone I****
Engineering Elective (see list)
M, S, Eng Elective (see list)
Elective

Spring

Capstone II****
Related Elective (see list)
Elective
Elective

* If you are especially interested in ecological applications in engineering, you may want to take BIOL 111

**If study abroad, a Lafayette faculty-led program for engineering students or the DIS-Stockholm program is recommended – discuss the options with your advisor

***take ME 362 this semester if you did not previously take CE 251 or ChE 311

****two-semester capstone course offered by CE or ME related to Environment & Energy – under certain circumstances, Honors Thesis (ES 495 & ES 496) can be substituted for capstone

Electives are used to fill the Common course of study (CCS) requirements: <https://ccs.lafayette.edu/chart/>

Note 1: Your 26 total courses for the IntE major must include 8 math/sci courses, EGRS 251, 13 engineering/cs courses + 2 M,S, Eng electives + 2 Environment & Energy related electives from any Division of the College.

Note 2: If you enter Lafayette with AP credit (e.g. for Calculus), talk to your advisor about how this schedule could be modified for your particular situation.

Note 3: If you switch to IntE in your second year, move ES 103 to spring second year, and ES 201 to fall third year.