Integrative Engineering – Bioengineering Focus
Typical Four-year Schedule

First Year:

Fall	Spring
ES 101 Intro to Eng	ES 103 Systems I
MATH 161 Calculus I	MATH 162 Calculus II
CHEM 107 General Chemistry I (L)	*PHYS 131/151 Physics I / Acc. Physics (L)
First Year Seminar	BIOL 112 Biomol Foundations (L)

Second Year:

Fall	Spring/Study Abroad**
ES 201 Systems II (L)	CS 104, 105, or 106/Elective
MATH 263 Calculus III	MATH 264 DEQs with Linear Algebra
ES 232 Biomaterials	Chem 108 General Chemistry II (L)/Elective
CS 104 or 105	Elective
BIOL 111 Unity and Diversity (L)/Elective	Elective

Third Year:

Fall	Spring
ECE 331 Signals and Systems (L)	ES 301 Biosystems
ChE 311 Transport/Elective	ME 362 Fluids***/Elective
EGRS 251 Intro to Eng Public Policy	Biology Elective
Engineering or Related Elective (see list)	Engineering or Related Elective (see list)
Biology Elective	Elective

Fourth Year:

Fall	Spring
Capstone I****	Capstone II
Engineering elective (see list)	Related Elective
Engineering elective (see list)	Elective
Elective	Elective

**If deciding between ChE and IntE, take CHEM 108 instead of Phys*
***If study abroad, a Lafayette faculty-led program for engineering students is recommended*
****take ME 362 this semester if you did not previously take ChE 311*
*****two-semester capstone course offered by ECE or ME related to Bioengineering*

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 + 12 engineering/cs courses + 2 Biology electives + 1 additional Science course + 2 Biosystems 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.