

Curriculum for B.S. in Biomedical Engineering

First Year		Second Year		Third Year		Fourth Year	
Fall [16 cr]	Spring [18 cr]	Fall [16 cr]	Spring [16 cr]	Fall [16 cr]	Spring [16 cr]	Fall [12 cr]	Spring [13 cr]
MATH 131 Calculus I [4 cr]	MATH 132 Calculus II [4 cr]	MATH 233 Multivariate Calculus [4 cr]	MATH 331 Differential Equations [3 cr]	ECE 361 Electrical Engin [3 cr]	STAT 515 Statistics [3 cr]	BME 430 Systems Biology [3 cr]	BME 415 Senior Design II [3 cr] (Integr.Exp req)
CHEM 111 Chemistry I [4 cr]	CHEM 112 Chemistry II [4 cr]	BME 210 Bioengineering [4 cr]	MIE 211/BME 297B Strength of Mat I [3 cr]	BME 310 Intro Lab.Techniques [3 cr]	BME 330 Quant. Physiology [3 cr]	BME 414 Senior Design I [3 cr]	Technical Elective [3 cr]
ENGIN 114 Intro to BME [3 cr]	*CMPSCI 119 Programming [3 cr]	BME 230 Statics and Dynamics [4 cr]	MIE 201 Mat Sci [3 cr]	BME 300 Biomaterials [3 cr]	BME 320 Bioinstrumentation [3 cr]	Technical Elective [3 cr]	Technical Elective [3 cr]
Social World Elective [4 cr]	PHYSICS 151 Gen. Physics I- Mechanics[4cr]	PHYSICS 152 Gen. Physics II- [4 cr]	BME 275 Biomechanics [3 cr]	ENGIN 351 Writing in Engin. [3 cr]	Technical Elective [3 cr]	Technical Elective [3 cr]	Social World Elective [4 cr]
ENGIN 191 Freshman seminar [1 cr]	ENGLWRIT 112 College Writing [3 cr]		KIN 270 Anat. & Physiology I [4 cr]	Social World Elective [4 cr]	Social World Elective [4 cr]		

**\* Alternatives: Students interested in Bioinstrumentation and Sensors should take ECE 122 Intro. Prog., and those interested in advanced computer programming can take CS 121**

- 1) CS 119 may be taken in Fall or Spring of freshman year; it can be swapped with the Social World/Diversity elective.
- 2) Students interested in Bioinstrumentation should take ECE 122; CMPSCI 121 requires Math 131 as a prerequisite.
- 3) Phys 152 and KIN 270 can swap semesters.
- 4) BME 310 will be offered in both fall and spring semesters.
- 5) BME 414: Preferred to have all core courses as prerequisites. Department approval needed for students taking BME 300 or 310 as co-requisites.
- 6) Students must have at least five (5) technical electives (or 15 credits). No more than three (3) electives may be at the 200-level, and only one of those may be an Engineering course. Students must have at least two (2) 300-level or higher technical elective courses.
- 7) Students must have a cumulative and major GPA of at least 2.0 in order to graduate.
- 8) Contact the BME advisor if you have questions