BIOMEDICAL ENGINEERING

Sample Four-Year Schedule
Required prerequisite(s) indicated in parentheses & notes
Must earn at least a grade of "C" in each course except for most University Core courses.

FRESHMAN YEAR

FALL

MATH 1710, Calculus I (see note 1)	4
CHEM 1410 or CHEM 1415, Chemistry (see note 2)	3
CHEM 1430 or CHEM 1435, Chemistry Lab (see note 2)	1
BMEN 1300, Discover BMEN	3
Communication Core course	3
University Core course	3
Total Hours	17

SPRING

MATH 1720, Calculus II (MATH 1710)	3
BIOL 2301, Human Anatomy & Physiology	3
BIOL 2311, Human Anatomy & Physiology Lab	1
BMEN 1400, Software for Biomed (MATH 1650 or higher)	4
TECM 2700, Tech. Writing (Communication Core)	3
Total Hours	14

SOPHOMORE YEAR

FALL

MATH 2700, Linear Algebra (MATH 1720)	3
PHYS 1710, Mechanics (MATH 1710)	3
PHYS 1730, Mechanics Lab (MATH 1710)	1
BMEN 2210, DAQ Practices (MATH 1720)	3
Elective Track Course (see note 7)	3
University Core course	3
Total Hours	16

SPRING

MATH 3410, Differential Equations (MATH 1720)	3
BMEN 2320, Biomed. Instrumentation I (see note 3)	3
Elective Track Course (see note 7)	3
University Core course	3
University Core course	3
Total Hours	15

JUNIOR YEAR

FALL

MATH 2730, Multi. Calculus or MATH 3350 (see note 4)	3
BMEN 3310, Human Systems (see note 5)	3
BMEN 3311, Signal Analysis (BMEN 2320)	3
BMEN 3350, Transp. Phenom. (see note 6)	3
Elective Track course (see note 7)	3
Total Hours	15

SPRING

MATH 3680, Statistics and Probability (MATH 1720)	3
BMEN 3312, Intro. to Biomech. (BMEN 3310, PHYS 1710)	3
BMEN 3321, Biomaterials (BMEN 3310, PHYS, CHEM)	3
Elective Track course (see note 7)	3
University Core course	3
Total Hours	15

SENIOR YEAR

FALL

BMEN 4310, Modeling (BMEN 3321) or Grad Track	3
BMEN 4212, Senior Design I (BMEN 3*** reqts)	1
BMEN 4***, Advanced Elective (BMEN 3311, 3312)	3
Elective Track course (see note 7)	3
University Core course	3
Total Hours	13

SPRING

BMEN 4222, Senior Design II (BMEN 4212)	3
BMEN 4***, Advanced Elective or Grad Track course	3
BMEN 4***, Advanced Elective or Grad Track course	3
Elective Track course (see note 7)	3
University Core course	3
Total Hours	15

Notes:

Note 1: MATH 1710 requires one of the following as prerequisite: completion of MATH 1650 with a grade of "C" or higher; or Freshman Math Group Level 3; or approval authorized by score via mathematics testing; or earned credit for a math course at or above the MATH 1710 level.

Note 2: CHEM 1410 & 1430 requires MATH 1100, College Algebra (or higher) as prerequisite. CHEM 1415 & 1435 requires MATH 1650, Pre-Calculus (or higher) as prerequisite.

Note 3: BMEN 2320 requires completion of BMEN 1300, BMEN 2210, BMEN 1400 or concurrent enrollment in BMEN 1400.

Note 4: MATH 2730 requires completion of MATH 1720. MATH 3350 requires completion of MATH 2700 and Programming.

Note 5: BMEN 3310 requires completion of BMEN 1300, BMEN 2320, BIOL 2301, and BIOL 2311.

Note 6: BMEN 3350 requires completion of BMEN 1300, MATH 3410, PHYS 1710, and CHEM reqt.

Note 7: Elective Track Courses depend on your chosen BMEN track. See BMEN curriculum page for options. Some track courses are offered fall only or spring only. Must meet prerequisite for track courses.

Must earn at least a grade of "C" and a minimum 2.5 GPA in Communications Core, TECM 2700, BMEN 1300, BMEN 1400, BMEN 2210, BMEN 2320, MATH 1710, MATH 1720, PHYS 1710, PHYS 1730, BIOL 2301, BIOL 2311, CHEM 1410, CHEM 1430 or CHEM 1415, 1435 as foundations to enroll in advanced courses.

This is an unofficial sample schedule. Requirements, prerequisites, etc. may change. Students should meet with an advisor each semester for individual scheduling, program decisions, etc. Engineering admissions requirements must be met & a degree audit must be created in order to progress in the program to a timely graduation.