Flow Chart - Bachelor of Science Degree in Biomedical Engineering (2020-21)
Tissue Engineering (TE) Concentration

Pre-professional Program

1st Yr
Fall Sem 18 hrs
- MATH 1426 Calculus I
- PHYS 1443 Tech Phys I (w/ Lab)
- BIOL 1441 Cell & Molecular Biology
- MATH 2425 Calculus II
- CHEM 1441 Gen Chem I (w/ Lab)
- ENGR 1250 Eng Probs Solving (or ENGR 1255)
- BE 1105 Med Appl. of Eng.
- BIOL 3320 Measurement Lab
- MATH 3319 Diff Eq & Lin Algebra

1st Yr
Spr Sem 18 hrs
- MATH 2326 Calculus III
- PHYS 1444 Tech Phys II (w/ Lab)
- CHEM 1442 Gen Chem II (w/ Lab)
- BE 2315 Intro Computational Tools for BE
- HIST 1301 U.S. History to 1865 (or HIST 1331)
- POLS 2302 Prof, Tech Communication
- BE 3415 Fundamentals of Bio-Molecu Eng
- UNIV 1131 Student Success or ENGR 1101

2nd Yr
Fall Sem 17 hrs
- EE 2440 or CSE 2440 Circuit Anal w lab
- MATH 3319 Diff Eq & Lin Algebra
- BE 3320 Measurement Lab
- MATH 3316 Stats Inference or IE 3301 Eng Prob
- PRE-req: MATH 2425
- BE 3330 or BE 3331 (Choose one)
- 3 Hrs Creative Arts (choose 1 from Table A)

2nd Yr
Spr Sem 17 hrs
- CHEM 1444 concurrent w/ 3320 OK
- MATH 3316 Stats Inference or IE 3301 Eng Prob
- PRE-req: MATH 2425
- PHIL 1304 Contemp Moral prob
- HIST 1302 U.S. History Since 1865 (or HIST 1332)

3rd Yr
Fall Sem 15 hrs
- BE 4382 Lab Principles
- BE Tech Elec Approved by UG Advisor
- BE 3380 Human Physio in BE
- BE 4368 or BE 4364 or BE 4372 (Choose one)
- BE 3317 Linear Systems in Bioengineering
- POLS 2311 U.S. Government
- 3 hr in Soc, Behavi Sci (choose 1 from Table A). Psychology or Sociology recommended

3rd Yr
Spr Sem 15 hrs
- BE 3310 or BE 4312 (Choose one)
- BE 3301 Cell Physio for Bioengineers
- BE 3367 or BE 4365 or BE 4373 (Choose one)
- POLS 2312 St & Local Government

4th Yr
Fall Sem 15 hrs
- BE 4337 or BE 4314 (Choose one)
- BE 4350 Senior Design Project 1
- BE 4350 Senior Design Project 1
- BE Tech Elec (Approved by UG Advisor)
- HIST 1302 U.S. History Since 1865 (or HIST 1332)

4th Yr
Spr Sem 12 hrs
- BE 4333 or BE 4331 (Choose one)
- BE 4355 Senior Design Project 2 (Instructor permission)
- PHIL 1304 Contemp Moral prob
- 3 hr in Soc, Behavi Sci (choose 1 from Table A). Psychology or Sociology recommended

Students in Pre-Professional Program must complete all Sci/Eng/Math courses (not including statistics), BE 3415, 3320, ENGL1301 and COMS2302 prior to taking any Professional Program courses. Admission to Professional Program is required to take any Professional Program courses.

This document is subject to revision.
Updated 10/21/2020