**Flow Chart - Bachelor of Science Degree in Biomedical Engineering (2019-20)**

**Tissue Engineering (TE) Concentration**

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**Prerequisite**

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.

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**1st Yr**

Fall Sem 18 hrs

- MATH 1426 Calculus I
- BIOL 1441 Cell & Molecular Biology
- CHEM 1441 Gen Chem I (w/ Lab)
- BE 1105 Med Appl. of Eng.
- BE 1325 Intro to BE
- ENGR 1250 Eng Probs Solving
- UNIV 1131 Student Success

1st Yr Spr Sem 18 hrs

- MATH 2425 Calculus II
- BIOL 1442 Stru & Func of Organisms
- CHEM 1442 Gen Chem II (w/ Lab)
- BE 2315 Intro Computational Tools for BE
- HIST 1301 U.S. History to 1865
- ENGL 1301 Rhetoric & Composition I
- COMS 2302 Prof, Tech Communication

**2nd Yr**

Fall Sem 17 hrs

- PHYS 1443 Tech Phys I (w/ Lab)
- MATH 2326 Calculus III
- BE 3415 Fundamentals of Bio-Molecu Eng
- MATH 3316 Stats Inference or IE 3301 Eng Prob

Spr Sem 17 hrs

- PHYS 1444 Tech Phys II (w/ Lab)
- MATH 3319 Diff Eq & Lin Algebra
- BE 3320 Measurement Lab
- BE 2310 Eng Appy to Solve Clinic Challenges
- Counted as a BE Tech Elec

**3rd Yr**

Fall Sem 15 hrs

- BE 4382 Lab Principles
- 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

Spr Sem 15 hrs

- BE Tech Elec Approved by UG Advisor
- 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 3530 Senior Design Project 1
- PHIL 1304 Contemp Moral prob
- HIST 1302 U.S. History Since 1865

Spr Sem 12 hrs

- BE 4333 or BE 4331 (Choose one)
- BE 4350 Senior Design Project 2 (Instructor permission)
- BE Tech Elec (Approved by UG Advisor)
- 3 Hrs Creative Arts (choose 1 from Table A)
- 3 hr in Soc, Behavi Sci (choose 1 from Table B). Psychology or Sociology recommended

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This document is subject to revision.
Updated 4/12/2019