Bachelor of Science – Engineering Innovation and Leadership
Degree Plan - Biomedical Engineering Concentration (checklist)

NOTE: Overall GPA ≥ 2.0 AND In-Major GPA ≥ 2.0 REQUIRED for graduation

A. Core Curriculum (45 SCH) (minimum of "C" grade required) Semester Completed Final Grade SCH Sub #

1. Communication (6 credit hours required)
   - RWS 1301* Rhetoric and Composition I
   - RWS 1302* Rhetoric and Composition II

2. Mathematics (4)
   - MATH 1411* Calculus I

3. Life and Physical Sciences (8)
   - PHYS 2320* Introductory Mechanics
   - PHYS 2320* Laboratory for PHYS 2320
   - PHYS 2321* Introductory Electromagnetism
   - PHYS 2321* Laboratory for PHYS 2321

4. Language, Philosophy, and Culture (3)
   - PHL 2300* Ethics

5. Creative Arts (3)
   - Select and circle one:
     - ART 1300*, ARTH 1305*, 1306*, CHIC 1311*, DANC 1304*, FILM 1390*, MUSL 1324*, 1327*, 2321*, THEA 1313*

6. American History (6)
   - HIST 1301* History of the U.S. to 1865
   - HIST 1302* History of the U.S. since 1865

7. Government/Political Science (6) – all 6 SCH must be completed at the same institution
   - POLS 2310* Introduction to Politics
   - POLS 2311* American Govt. & Politics

8. Social and Behavioral Sciences (3)
   - CE 2326* Econ. For Engrs & Scientists

9. Component Area Option (6)
   - EL 1301* Eng. Innovation & Leadership
   - CS 1320** Computer Programming Sci. / Engr.

B. Foundational Math & Science (12 SCH) Semester Completed Final Grade SCH Sub #

   - CHEM 1305* General Chemistry
   - MATH 1312* Calculus II
   - MATH 2313* Calculus III
   - MATH 2326* Differential Equations

C. Engineering Leadership Coursework (25 SCH) Semester Completed Final Grade SCH Sub #

   - EL 1402* Fund of Leadership, Design & Graphics
   - EL 2301* Modeling and Simulation
   - EL 3302* Engineering Measurements
   - EL 3003* Professional Practice I
   - EL 3005* Professional Practice II
   - EL 3331* Engineering Design: People to Products
   - EL 3332* Engineering Entrepreneurship: Products to People
   - EL 3373* or IE 3373 or EE 3384 Engr Probability & Stat Models
   - EL 4395* Capstone Design I: Definition & Exploration
   - EL 4396* Capstone Design II: Development & Evaluation

D. Biomedical Concentration Required Courses (16 SCH) Semester Completed Final Grade SCH Sub #

   - MATH 2326* Differential Equations
   - CHEM 1305* General Chemistry
   - MATH 1312* Calculus II
   - MATH 2313* Calculus III

E. Emphasis Courses (14 SCH) for Biomedical Concentration Semester Completed Final Grade SCH Sub #

   - BIOL 1305 General Biology & Topics in Study of Life I w Lab
   - BIOL 1107
   - BIOL 2311** Human Anat / Physiology I w Lab
   - BIOL 2111

F. Biomedical Technical Electives (10 SCH) see advisor for approved courses Semester Completed Final Grade SCH Sub #

   - BME 3303 Fundamentals of BME I
   - BME 3305 Fundamentals of BME II

BSEL Total Hours 125

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**SUBSTITUTIONS**

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<th>Institution where course was taken</th>
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**APPROVALS:**

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