### BACHELOR OF SCIENCE IN BIOENGINEERING - 4 Year 2-coop Plan

**CURRICULUM OUTLINE - CLASS OF 2018, 2019**

*Sample Only – Actual Curriculum Sequence May Deviate from Sample*

#### Year 1 (FALL)
- **CHEM1151**: General Chem. for Engrs. 4
- **CHEM1152**: Recitation for CHEM1151 0
- **GE1000**: Intro to Eng’g. 1
- **GE1110**: Eng’g. Design 4
- **MATH1341**: Calculus 1 for Engrs. 4
- **NU CORE**: Arts or Humanities Lvl. 1 4

#### Year 1 (SPRING)
- **ENGW1111**: College Writing 4
- **GE1111**: Eng’g. Prob. Solv.& Comp. 4
- **MATH1342**: Calculus 2 for Engrs. 4
- **PHYS1171**: Physics 1 BioE 3
- **PHYS1172**: Physics 1 Lab 1
- **PHYS1173**: ILS for PHYS1171 1

#### Year 1 (SUMMER 1)
- **CHEM2319**: Recitation for CHEM2311 0

#### Year 1 (SUMMER 2)
- **School *

#### Year 2 (FALL)
- **BIOE2365**: Bio Inst. Mea. Imaging 4
- **BIOE2366**: Lab for BIOE2365 1
- **BIOE3310**: Intro to Eng’g, Co-op Elective 4
- **BIOE2355**: Quant. Physiology for BioE Elective 4
- **BIOE2330**: Biomechanics 4
- **BIOE2350**: Bioelectricity 4
- **BIOL1115**: Biology 4
- **BIOE3340**: Biomol. Dynamics & Ctrl. 4
- **BIOE3360**: Elective BioE Elective 4
- **GE2361**: Math. Methods for Engrs. 4
- **CHEM2311**: Organic Chemistry 1 4
- **PHYS1176**: Physics 2 Lab 1
- **CHEM2312**: Lab for CHEM2311 1
- **PHYS1175**: Physics 2 4
- **CHEM2313**: Recitation for CHEM2311 0
- **PHYS1177**: ILS for PHYS1175 1

#### Year 2 (SPRING)
- **BIOE3000**: Prof. Issues in Eng’g. 4
- **BIOE3310**: Transport & Fluids Elective 4
- **BIOE3570**: Capstone Design 1 4
- **BIOE3571**: BioE Elective 3 4
- **BIOE3572**: BioE Elective 5 4
- **BIOE3573**: General Elective 2 4

#### Year 2 (SUMMER 1)
- **BIOE Elective**: BioE Elective 3 4

#### Year 2 (SUMMER 2)
- **Co-op

#### Year 3 (FALL)
- **BIOE3000**: Prof. Issues in Eng’g. 4
- **BIOE3210**: Bioelectricity 4
- **BIOE3380**: Biomol. Dynamics & Ctrl. 4
- **Elective**: BioE Elective 1 4
- **Elective**: BioE Elective 2 4
- **Co-op

#### Year 3 (SPRING)
- **BIOE4792**: Capstone Design 2 4
- **Elective**: BioE Elective 4 4
- **Elective**: BioE Elective 5 4
- **Elective**: General Elective 2 4

#### Year 4 (FALL)
- **BIOE4792**: Capstone Design 2 4

#### Year 4 (SPRING)
- **BIOE Elective**: BioE Elective 3 4

#### Year 4 (SUMMER)
- **Capstone Design 2 4

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**You will meet with an academic advisor to determine scheduling of these required classes:**

- **Elective**: General Elective 3 4
- **Elective**: General Elective 4 4
- **Elective**: General Elective 5 4

*ENGW3302* is an acceptable substitution for engineering majors.

Students are encouraged to use AP credit and transfer credits obtained prior to coming to Northeastern to take advantage of the 4-year, 2-coop program.

*ENGW3315* is an acceptable substitute for engineering majors.

Students may take ENGW 3302 or ENGW 3315 to fulfill their Advanced Writing in the Technical Professions requirement.

**NU Core Elective Requirements:** 2 required - (one Arts Lvl 1 OR one Humanities Lvl 1) AND (one Social Science Lvl 1)

**BIOE Electives:** 5 required - 2 courses minimum from designated BIOE concentration; 3 from list of approved BIOE technical electives.

**BIOE Concentrations:** Bioimaging & Signal Processing, Cell & Tissue Engineering, Biomechanics, or Biomedical Devices.

**General Electives:** 5 required - Any 5 SH course that is not remedial or repetitive.

**Electives may be interchanged. Please consult with Bioengineering academic advisor:**

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The registrar's website provides a listing of degree requirements and the DARS system provides a degree audit utility for students.