## Bachelor of Science in Bioengineering
### Curriculum Outline - Class of 2019, 2020

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

### Year 1
**Fall**
- **CHEM1151**: General Chem. for Engrs. 4
- **CHEM1153**: Recitation for CHEM1151 0
- **ENGW1111**: College Writing 4
- **ENGW1111**: Eng’g. Prob. Solv. & Comp 4

**Spring**
- **MATH1341**: Calculus 1 for Engrs. 4
- **PHYS1171**: Physics 1 BioEngrs. 3
- **PHYS1172**: ILS for PHYS1171 1
- **PHYS1175**: Lab for PHYS1171 1

**Summer 1**
- **GE1110**: Eng'g. Design 4
- **GE1111**: Eng'g. Design 4

**Summer 2**
- **GE1000**: Intro to Eng'g. 4
- **GE1110**: Eng'g. Design 4

### Year 2 (AA)
**Fall**
- **BIOE2365**: BioE Inst. Mea. Imaging 4
- **BIOE2366**: Lab for BIOE2365 1
- **BIOE2350**: Biomechanics 4
- **BIOE2355**: Quant. Physiology for BioE 4

**Spring**
- **PHYS1175**: Physics 2 for BioE 3
- **PHYS1176**: ILS for PHYS1175 1
- **PHYS1177**: Lab for PHYS1175 1

**Summer 1**
- **NU CORE**: Social Science Lvl. 1 4
- **PHYS1176**: Lab for PHYS1175 1

**Summer 2**
- **BIOE2360**: Intro to Eng’g. Co-op 1
- **BIOE2365**: Lab for BIOE2365 1
- **BIOE2350**: Biomechanics 4
- **BIOE2355**: Quant. Physiology for BioE 4

### Year 2 (BB)
**Fall**
- **BIOE2350**: Biomechanics 4
- **BIOE2355**: Quant. Physiology for BioE 4
- **CHEM2311**: Lab for CHEM2311 1
- **CHEM2312**: Lab for CHEM2311 1

**Spring**
- **BIOE2360**: Intro to Eng’g. Co-op 1
- **BIOE2365**: Lab for BIOE2365 1
- **BIOE2350**: Biomechanics 4
- **BIOE2355**: Quant. Physiology for BioE 4

**Summer 1**
- **NU CORE**: Social Science Lvl. 1 4

**Summer 2**
- **NU CORE**: Social Science Lvl. 1 4

### Year 3 (AA)
**Fall**
- **BIOE2310**: Bioelectricity 4
- **BIOE3310**: Transport & Fluids Elective 4
- **BIOE3310**: General Elective 1 4
- **ENGW3302**: Adv. Writing for Prof. 4

**Spring**
- **BIOE3300**: Prof. Issues in Eng. Elective 4
- **BIOE3310**: Transport & Fluids Elective 4
- **BIOE3310**: General Elective 1 4
- **ENGW3302**: Adv. Writing for Prof. 4

**Summer 2**
- **BIOE4790**: Capstone Design 1 4

### Year 3 (BB)
**Fall**
- **BIOE3300**: Prof. Issues in Eng. Elective 4
- **BIOE3310**: Capstone Design 1 4

**Spring**
- **BIOE4790**: Capstone Design 1 4

### Year 4 (AA)
**Fall**
- **BIOE3300**: Prof. Issues in Eng. Elective 4
- **BIOE3310**: Capstone Design 1 4

**Spring**
- **BIOE4790**: Capstone Design 1 4

### Year 4 (BB)
**Fall**
- **BIOE3300**: Prof. Issues in Eng. Elective 4

**Spring**
- **BIOE4790**: Capstone Design 1 4

### Year 5 (AA)
**Fall**
- **BIOE3300**: Prof. Issues in Eng. Elective 4

**Spring**
- **BIOE4790**: Capstone Design 1 4

### Year 5 (BB)
**Fall**
- **BIOE3300**: Prof. Issues in Eng. Elective 4

**Spring**
- **BIOE4790**: Capstone Design 1 4

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* ENGW3315 is an acceptable substitution for engineering majors.*

### General Electives: 5 required - Any 4 SH course that is not remedial or repetitive.

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

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

**General Electives:** 5 required - Any 4 SH course that is not remedial or repetitive.

**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.

Electives may be interchanged. Please consult with your advisor: Eve Young - 220 Snell, 617-373-2154, e.young@neu.edu

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

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Revised 1/05/15