

**BACHELOR OF SCIENCE IN BIOENGINEERING  
CURRICULUM OUTLINE - CLASS OF 2019, 2020**

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

	FALL	SPRING	SUMMER 1	SUMMER 2
Freshman Year 1	<a href="#">CHEM1151</a> General Chem. for Engrs. 4 <a href="#">CHEM1153</a> Recitation for CHEM1151 0 <a href="#">GE1000</a> Intro to Eng'g. 1 <a href="#">GE1110</a> Eng'g. Design 4 <a href="#">MATH1341</a> Calculus 1 for Engrs. 4 <a href="#">NU CORE</a> Arts/Humanities Lvl. 1 4	<a href="#">ENGW1111</a> College Writing 4 <a href="#">GE1111</a> Eng'g. Prob. Solv. & Comp 4 <a href="#">MATH1342</a> Calculus 2 for Engrs. 4 <a href="#">PHYS1171</a> Physics 1 BioEngrs. 3 <a href="#">PHYS1172</a> ILS for PHYS1171 1 <a href="#">PHYS1173</a> Lab for PHYS1171 1	Vacation	Vacation
Year 2 (AA)	<a href="#">BIOE2365</a> BioE Inst. Mea. Imaging 4 <a href="#">BIOE2366</a> Lab for BIOE2365 1 <a href="#">BIOL1115</a> Biology for Engineers 4 <a href="#">BIOL1116</a> Lab for BIOL1115 1 <a href="#">GE2361</a> Math. Methods for Engrs 4 <a href="#">PHYS1175</a> Physics 2 for BioE 3 <a href="#">PHYS1176</a> ILS for PHYS1175 1 <a href="#">PHYS1177</a> Lab for PHYS1175 1	<a href="#">BIOE2000</a> Intro. To Eng'g. Co-op 4 <a href="#">BIOE2350</a> Biomechanics 4 <a href="#">BIOE2355</a> Quant. Physiology for BioE 4 <a href="#">CHEM2311</a> Org. Chem 1 4 <a href="#">CHEM2312</a> Lab for CHEM2311 1 <a href="#">CHEM2319</a> Recitation for CHEM2311 0 <a href="#">NU CORE</a> Social Science Lvl. 1 4	Vacation	Co-op
Year 2 (BB)	<a href="#">BIOE2000</a> Intro to Eng'g. Co-op 4 <a href="#">BIOE2365</a> BioE Inst. Mea. Imaging 4 <a href="#">BIOE2366</a> Lab for BIOE2365 1 <a href="#">BIOL1115</a> Biology for Engineers 4 <a href="#">BIOL1116</a> Lab for BIOL1115 1 <a href="#">GE2361</a> Math. Methods for Engrs 4 <a href="#">PHYS1175</a> Physics 2 for BioE 3 <a href="#">PHYS1176</a> Physics 2 Lab 1 <a href="#">PHYS1177</a> ILS for PHYS1175 1	Co-op	Co-op	Vacation
Year 3 (AA)	Co-op	<a href="#">BIOE3210</a> Bioelectricity 4 <a href="#">BIOE3380</a> Biomol. Dynamics & Ctrl. 4 Elective BioE Elective 1 4 <a href="#">*ENGW3302</a> Adv. Writing for Prof. 4	<a href="#">BIOE3310</a> Transport & Fluids 4 Elective General Elective 1 4	Co-op
Year 3 (BB)	<a href="#">BIOE2350</a> Biomechanics 4 <a href="#">BIOE2355</a> Quant. Physiology for BioE 4 <a href="#">CHEM2311</a> Org. Chem 1 4 <a href="#">CHEM2312</a> Lab for CHEM2311 1 <a href="#">CHEM2319</a> Recitation for CHEM2311 0 <a href="#">NU CORE</a> Social Science Lvl. 1 4	Co-op	Co-op	<a href="#">BIOE3310</a> Transport & Fluids 4 Elective General Elective 1 4
Year 4 (AA)	Co-op	<a href="#">BIOE3000</a> Prof. Issues in Eng. 1 Elective BioE Elective 2 4 Elective BioE Elective 3 4 Elective BioE Elective 4 4 Elective General Elective 2 4	<a href="#">BIOE4790</a> Capstone Design 1 4 Elective General Elective 3 4	Co-op
Year 4 (BB)	<a href="#">BIOE3000</a> Prof. Issues in Eng'g, 1 <a href="#">BIOE3210</a> Bioelectricity 4 <a href="#">BIOE3380</a> Bio. Dyn. & Ctrl. 4 Elective BioE Elective 1 4 <a href="#">*ENGW3302</a> Adv. Writing for Prof. 4	Co-op	Co-op	<a href="#">BIOE4790</a> Capstone Design 1 4 Elective General elective 2 4
Year 5 (AA)	Co-op	<a href="#">BIOE4792</a> Capstone Design 2 4 Elective BioE Elective 5 4 Elective General Elective 4 4 Elective General Elective 5 4		
Year 5 (BB)	<a href="#">BIOE4792</a> Capstone Design 2 4 Elective BioE Elective 2 4 Elective BioE Elective 3 4 Elective General Elective 3 4	Elective BioE Elective 4 4 Elective BioE Elective 5 4 Elective General Elective 4 4 Elective General Elective 5 4		

Revised 1/05/15

[\\* ENGW3315](#) is an acceptable substitution 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)**

**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.