

**BACHELOR OF SCIENCE IN BIOENGINEERING**  
**CURRICULUM OUTLINE - CLASS OF 2021, 2022, 2023**  
*Sample Only – Actual Curriculum Sequence May Deviate from Sample*

	FALL	SPRING	SUMMER 1	SUMMER 2
Year 1	<a href="#">MATH1341</a> Calculus 1 for Engrs. 4 <a href="#">CHEM1151</a> General Chem. for Engrs. 4 <a href="#">CHEM1153</a> Recitation for CHEM1151 0 <a href="#">GE_1501</a> Cornerstone of Eng'g. 1 <a href="#">GE_1000</a> Intro. to Eng'g. 1 <a href="#">ENGW1111</a> College Writing 4	<a href="#">MATH1342</a> Calculus 2 for Engrs. 4 <a href="#">PHYS1171</a> Physics 1 for BioE 3 <a href="#">PHYS1172</a> Physics 1 Lab 1 <a href="#">PHYS1173</a> ILS for PHYS1151 1 <a href="#">GE_1502</a> Cornerstone of Eng'g. 2 4 Elective General Elective 4	Vacation	Vacation
Year 2 (AA)	<a href="#">BIOE2365</a> BioE Meas. Exp. & Stats. 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 1 <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 Elective General Elective 4	Vacation	Co-op
Year 2 (BB)	<a href="#">BIOE2000</a> Intro to Eng'g. Co-op 1 <a href="#">BIOE2365</a> BioE Meas. Exp. & Stats. 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 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 Elective General Elective 4	Co-op	Co-op	<a href="#">BIOE3310</a> Transport & Fluids 4 Elective General Elective 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 4	<a href="#">BIOE4790</a> Capstone Design 1 4 Elective General Elective 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 4
Year 5 (AA)	Co-op	<a href="#">BIOE4792</a> Capstone Design 2 4 Elective BioE Elective 5 4 Elective General Elective 4 Elective General Elective 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 4	Elective BioE Elective 4 4 Elective BioE Elective 5 4 Elective General Elective 4 Elective General Elective 4		

Revised 7/16/17

\* ENGW3315 is an acceptable substitution. Students may take ENGW 3302 or ENGW 3315 to fulfill their Advanced Writing in the Technical Professions requirement.

**NUpath requirements Interpreting Culture (IC), Societies and Institutions (SI), and Differences and Diversity (DD)** are not explicitly satisfied by required engineering courses.

Students are responsible for satisfying these requirements, and if these are not fulfilled in engineering courses, should use General Electives to do so.

General Electives are academic, non-remedial, non-repetitive courses.

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

**BIOE Electives** are used to fulfill the concentration. Total of 5 courses (3 required, 2 elective from approved list)

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.