

PlusOne Curriculum for BIOENGINEERING

Sample Only – Actual Curriculum Sequence May Deviate from Sample

BACHELOR OF SCIENCE IN BIOENGINEERING - 4 YEAR 2 COOP OPTION - CLASS OF 2021, 2022

| | FALL | | SPRING | | SUMMER 1 | | SUMMER 2 | | |
|--------------------|--------------------------|---|--------|--------------------------|----------------------------|---|--------------------------|--------------------|----------|
| Freshman Year 1 | MATH1342 | Calculus 2 for Engrs. | 4 | GE2361 | Math. Methods for Engrs. | 4 | Elective | General Elective | 4 |
| | CHEM1151 | General Chem. for Engrs. | 4 | PHYS1171 | Physics 1 for BioE | 3 | Elective | General Elective | 4 |
| | CHEM1153 | Recitation for CHEM1151 | 0 | PHYS1172 | Physics 1 Lab | 1 | | | |
| | GE 1501 | Cornerstone of Eng'g. 1 | 4 | PHYS1173 | ILS for PHYS1151 | 1 | | | Vacation |
| | GE 1000 | Intro. to Eng'g. | 1 | GE 1502 | Cornerstone of Eng'g. 2 | 4 | | | |
| | ENGW1111 | College Writing | 4 | Elective | General Elective | 4 | | | |
| Year 2 (MC) | BIOE2365 | BioE Meas. Exp. & Stats. | 4 | BIOE2000 | Intro to Eng'g, Co-op | 1 | BIOE3310 | Transport & Fluids | 4 |
| | BIOE2366 | Lab for BIOE2365 | 1 | BIOE2350 | Biomechanics | 4 | Elective | General Elective | 4 |
| | BIOL1115 | Biology | 4 | BIOE2355 | Quant. Physiology for BioE | 4 | | | |
| | BIOL1116 | Lab for BIOL1115 | 1 | CHEM2311 | Organic Chemistry 1 | 4 | | | |
| | PHYS1175 | Physics 2 for BioE | 3 | CHEM2312 | Lab for CHEM2311 | 1 | | | Co-op |
| | PHYS1176 | Physics 2 Lab | 1 | CHEM2319 | Recitation for CHEM2311 | 0 | | | |
| | PHYS1177 | ILS for PHYS1175 | 1 | Elective | General Elective | 4 | | | |
| | Elective | General Elective | 4 | | | | | | |
| Year 3 (MC) | | Co-op | | BIOE3000 | Prof. Issues in Eng'g. | 1 | BIOE4790 | Capstone Design 1 | 4 |
| | | | | BIOE3210 | Bioelectricity | 4 | Elective | General Elective | 4 |
| | | | | BIOE3380 | Biomol. Dynamics & Ctrl. | 4 | | | |
| | | | | Elective | BioE Elective 1 | 4 | | | Co-op |
| | | | | Elective | BioE Elective 2 | 4 | | | |
| Year 4 (MC) | ENGW3302 | Adv Writing in the Tech Prof <i>(to be taken online)</i> | 4 | BIOE4792 | Capstone Design 2 | 4 | | | |
| | | | | Elective | BioE Elective 3 | 4 | | | |
| | | | | Elective | BioE Elective 4 | 4 | | | |
| | | Co-op | | Elective | BioE Elective 5 | 4 | | | |

Revised 12/14/18

You will need to have AP credit for Calc. AB (MATH1341 - Calculus 1 - 4 SH) - see advisor

*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.

MASTER OF SCIENCE IN BIOENGINEERING CURRICULUM

| | FALL | | SPRING | | |
|---------|--------------------------|--------------------|--------|--------------------|---|
| PlusOne | BIOE6100 | Medical Physiology | 4 | Graduate Course #7 | 4 |
| Year | | Graduate Course #6 | 4 | Graduate Course #8 | 4 |

For more information about the PlusOne program or for assistance with applying to the program, please contact the Graduate Student Services Team at support@husky.desk-mail.com.