## BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING - 4 YEAR 2 COOP OPTION

**CURRICULUM OUTLINE - CLASS OF 2020, 2021, 2022**

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

### FALL | SPRING | SUMMER 1 | SUMMER 2
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**Year 1**
MATH1341 Calculus 1 for Engrs. & CHEM1151 General Chem for Engrs. | MATH1342 Calculus 2 for Engrs. & PHYS1151 Physics 1 for Engrs. | Elective | General Elective | 4
CHEM1153 Recitation for CHEM1151 & PHYS1111 College Writing | PHYS1152 Physics 1 Lab | 1 | 1 | 4
ENGW1111 Intro to Eng’g. & PHYS1153 ILS for PHYS1151 | PHYS1154 Comerstone of Engineering 1 | 4 | 4 | 4
ENGW1111 College Writing & PHYS1155 Comerstone of Engineering 2 | Elective | General Elective | 4
**Year 2**
MATH2341 Diff. Eq./Lin. Alg. & PHYS1156 Physics 2 for Engrs. | MATH2321 Calculus 3 for Engrs. & EECE2300 Intro to Eng’g. Coop | Elective | General Elective | 4
PHYS1157 Physics 2 Lab & PHYS1158 ILS for PHYS1155 | EECE2310 Embedded Design: Enabling Robotics | 4 | 4 | 4
EECE2150 Circuits/Signals: Biomed App | EECE2330 EE Fundamentals | 4/5 | 4/5 | 4
Elective & Elective | Elective | General Elective | 4
**Year 3**
ENGW1302 Adv Writing In the Tech Prof & ILS for PHYS1155 (to be taken online) | EECE2331 Prof. Issues in Eng’g. | Co-op | Capstone 1 | 4
(EECE2332) | EECE3300 EE Fundamentals | Co-op | EECE Tech Elective 2 | 4
Elective | Elective | General Elective | 4
**Year 4**
MATH2341 Diff. Eq./Lin. Alg. & MATH2342 Calculus 3 for Engrs. | ILS for PHYS1155 (to be taken online) | Elective | EECE Tech Elective 1 | 4
PHYS1156 Physics 2 Lab & PHYS1158 ILS for PHYS1155 | Elective | EECE Tech Elective 1 | 4
EECE2150 Circuits/Signals: Biomed App & Elective | Co-op | Capstone 1 | 4
EECE3330 Prof. Issues in Eng’g. | EECE4790 Co-op | EECE4790 | 4
**Year 5**
EECE2322/2323 - Fundamentals Digital Design & Lab | Capstone Design 2 | Elective | EECE Tech Elective 2 | 4
OR EECE2540 - Fundamentals Networks | Elective | EECE4792 Elective | 4
OR EECE2560 - Fundamentals Algorithms | Elective | EECE Tech Elective 2 | 4
EECE2332/2333 - Fundamentals Digital Design & Lab | Elective | EECE Tech Elective 3 | 4
Elective | Elective | General Elective | 4
(EECE Fundamentals not taken to meet the above requirement may also be taken as a technical elective)

### Technical Elective Requirements: 4 EECE technical electives

EECE2322, (EECE2540-EECE2750), EECE3154, (EECE3324-EECE3410), (EECE4512-EECE4698), (EECE4991-EECE4993), (EECE5515-EECE5698), GE4608, ENGR5670

*Please check with your advisor when taking a general elective in overlapping disciplines:*

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Last Name M-Z: Emily Ferraro- e.ferraro@northeastern.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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### Technical Elective Requirements:

- **4 EECE technical electives**

### General Elective Requirements:

- **7 Required General Electives**
- **3 Required CE Fundamentals**
- **1 Required CE Fundamental**

### General Elective Substitutions:

- **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.**

- **7 Required General Electives**
- **3 Required CE Fundamentals:** EECE2322/2333 - Fundamentals Digital Design & Lab
- **1 Required CE Fundamental:** EECE2332/2333 - Fundamentals Digital Design & Lab

### Technical Elective Requirements:

- **4 EECE technical electives**

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**NUpath Requirements through General Electives:** 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. The registrar’s website provides a listing of degree requirements and the DARS system provides a degree audit utility for students.