

**BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING  
COMBINED MAJOR - ELECTRICAL ENGINEERING AND PHYSICS  
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="#">PHYS1161</a> Physics 1 4 <a href="#">PHYS1162</a> Physics 1 Lab 1 <a href="#">GE1000</a> Intro to Eng'g 1 <a href="#">GE1501</a> Cornerstone of Engineering 1 4		<a href="#">MATH1342</a> Calculus 2 for Engrs. 4 <a href="#">PHYS1165</a> Physics 2 4 <a href="#">PHYS1166</a> Physics 2 Lab 1 <a href="#">GE1502</a> Cornerstone of Engineering 2 4 <a href="#">ENGW1111</a> College Writing 4		Vacation	Vacation
Year 2 AA	<a href="#">MATH2321</a> Calculus 3 for Engrs. 4 <a href="#">MATH2341</a> Diff. Eq./Lin. Alg. 4 <a href="#">PHYS2303</a> Modern Physics 4 <a href="#">EECE2150</a> Circuits/Signals: Biomed Apps 5		<a href="#">PHYS2305</a> Therm & Stat. Mech. 4 <a href="#">EECE2000</a> Intro to Eng'g. Coop 1 <a href="#">EECE2160</a> Embedded Design: Enabling Roboti 4 EECExxxx EE Fundamentals 4/5 Elective General Elective 4		Vacation	Co-op
Year 3 AA	Co-op		<a href="#">PHYS3602</a> Elect. & Magnetism 4 EECExxxx EE Fundamentals 4/5 EECExxxx CE Fundamentals 4/5 * <a href="#">ENGW3302</a> Adv. Writing for Prof. 4	Elective General Elective 4 <a href="#">PHYS3600</a> Adv. Physics Lab 4		Co-op
Year 4 AA	Co-op		<a href="#">PHYS5115</a> Quantum Mechanics 4 <a href="#">EECE3000</a> Prof. Issues in Eng'g. 1 EECExxxx EE Fundamentals 4/5 <a href="#">EECE3468</a> Noise & Stoch. Proc. 4 Elective EECE Tech Elective 1 4	Elective EECE Tech Elective 2 4 <a href="#">EECE4790</a> Capstone 1 4		Co-op
Year 5 AA	Co-op		<a href="#">EECE4792</a> Capstone Design 2 4 PHYSxxxx Adv. Physics Elective 4 Elective General Elective 4			

Revised March/2018

The Capstone Design Courses are taken as follows: (EECE4790 - Summer 1 and EECE4792 - Spring) OR (EECE4790 - Summer 2 and EECE4792 - Fall)  
\* [ENGW3315](#) is an acceptable substitution for engineering majors.

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.

**3 Required General Electives**

**3 Required EE Fundamentals:** EECE2412/2413 - Fundamentals Electronics 1 & lab AND EECE2520 - Fundamentals Linear Systems AND EECE 2530/2531 - Fundamentals Electromagnetics & lab.

**1 Required CE Fundamental:** EECE2322/2323 - Fundamentals Digital Design & Lab OR EECE2540 - Fundamentals Networks OR EECE2560 - Fundamentals Algorithms

(CE Fundamentals not taken to meet the above requirement may also be taken as a technical elective)

**Technical Elective Requirements: 2 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:

Last Name A-L: Ellen Zierk- e.zierk@northeastern.edu

Last Name M-Z: Nicole Diamond - n.diamond@northeastern.edu

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