

**BACHELOR OF SCIENCE IN COMPUTER ENGINEERING
COMBINED MAJOR - COMPUTER ENGINEERING AND PHYSICS
CURRICULUM OUTLINE - CLASS OF 2019,2020**

Sample Only – Actual Curriculum Sequence May Deviate from Sample

	FALL	SPRING	SUMMER 1	SUMMER 2
Year 1	MATH1341 Calculus 1 for Engrs. 4 CHEM1151 General Chem. for Engrs. 4 CHEM1153 Recitation for CHEM1151 0 PHYS1161 Physics 1 4 PHYS1162 Physics 1 Lab 1 GE1000 Intro to Eng'g 1 GE1110 Eng'g. Design 4	MATH1342 Calculus 2 for Engrs. 4 PHYS1165 Physics 2 4 PHYS1166 Physics 2 Lab 1 GE1111 Eng'g Prob. Solv. & Comp. 4 ENGW1111 College Writing 4	Vacation	Vacation
Year 2 AA	MATH2321 Calculus 3 for Engrs. 4 MATH2341 Diff. Eq./Lin. Alg. 4 PHYS2303 Modern Physics 4 EECE2160 Embedded Systems: Enabling Robotics 3 EECE2161 Lab for EECE2160 1	PHYS2305 Thermo & Stat. Mech. 4 EECE2000 Intro to Eng'g. Coop 1 EECE2150 Circuits/Signals: Biomed Apps 4 EECE2151 Lab for EECE2150 1 EECExxxx CE Fundamentals 4/5 CS1800 Discrete Structures 4 CS1801 Recitation for CS1800 0	Vacation	Co-op
Year 3 AA	Co-op	PHYS3602 Elect. & Magnetism 4 EECExxxx CE Fundamentals 4/5 EECExxxx EE Fundamentals 4/5 * ENGW3302 Adv. Writing for Prof. 4	NU Core Social Science Lvl. 1 4 PHYS3600 Adv. Physics Lab 4	Co-op
Year 4 AA	Co-op	PHYS5115 Quantum Mechanics 4 EECE3000 Prof. Issues in Eng'g. 1 EECExxxx CE Fundamentals 4/5 NU Core Arts Lvl 1 OR Hum. Lvl 1 4 MATH3081 Probability 4	EECE4790 Capstone 1 4 Elective EECE Tech Elective 1 4	Co-op
Year 5 AA	Co-op	EECE4792 Capstone Design 2 4 Elective Adv. Physics Elective 4 Elective EECE Tech Elective 2 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.

NU Core Elective Requirements: 2 required: (one Arts Lvl 1 OR one Humanities Lvl 1) AND (one Social Science Lvl 1)

5 Required General Electives (any 4SH academic course that is not remedial or repetitive)

3 Required CE Fundamentals: EECE2322/2323 - Fundamentals Digital Design & Lab AND EECE2540 - Fundamentals Networks AND EECE2560 - Fundamentals Algorithms

1 Required EE Fundamentals: EECE2412/2413 - Fundamentals Electronics 1 & lab OR EECE2520 - Fundamentals Linear Systems OR EECE 2530/2531 - Fundamentals Electromagnetics & lab (EE Fundamentals not taken to meet the above requirement may also be taken as a technical elective)

Technical Elective Requirements: 2 EECE technical electives:

(EECE2412-2530), EECE2750, EECE3154, (EECE3324-EECE3468), (EECE4512-EECE4698), (EECE4991-EECE4993), (EECE5155-EECE5698), ENGR5670, GE4608

1 CS courses from the following approved list may be taken toward the EECE technical elective requirement:

Approved List: CS2550, (CS3200-CS3500), (CS3540-CS3800), (CS4100-CS4770), CS4850, (IS4200- IS4700)

Note: AP credit for MATH2280 will substitute for MATH3081 requirement.

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.