

**BACHELOR OF SCIENCE IN COMPUTER ENGINEERING**  
**MASTER OF SCIENCE IN ELECTRICAL AND COMPUTER ENGINEERING**  
**BS/MS CURRICULUM OUTLINE - CLASS OF 2019, 2020**

*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="#">MATH1342</a>	Calculus 2 for Engrs.	4	Vacation		Vacation			
	<a href="#">CHEM1151</a>	General Chem for Engrs.	4	<a href="#">PHYS1151</a>	Physics 1 for Engrs.	3						
	<a href="#">CHEM1153</a>	Recitation for CHEM1151	0	<a href="#">PHYS1152</a>	Physics 1 Lab	1						
	<a href="#">GE1000</a>	Intro to Eng'g.	1	<a href="#">PHYS1153</a>	ILS for PHYS1151	1						
	<a href="#">GE1110</a>	Eng'g. Design	4	<a href="#">GE1111</a>	Eng'g. Prob. Solv. & Comp.	4						
	<a href="#">NU Core</a>	Arts Lvl. 1 OR Hum. Lvl. 1	4	<a href="#">ENGW1111</a>	College Writing	4						
Year 2 AA Plan 1	<a href="#">MATH2341</a>	Diff. Eq./Lin. Alg.	4	<a href="#">CS1800</a>	Discrete Structures	4	<a href="#">MATH3081</a>	Probability & Stats.	4	Co-op		
	<a href="#">PHYS1155</a>	Physics 2 for Engrs.	3	<a href="#">CS1802</a>	Recitation for CS1800	1	<a href="#">NU Core</a>	Social Science Lvl. 1	4			
	<a href="#">PHYS1156</a>	Physics 2 Lab	1	EECExxxx	CE Fundamentals	4/5						
	<a href="#">PHYS1157</a>	ILS for PHYS1155	1	EECExxxx	CE Fundamentals	4/5						
	<a href="#">EECE2150</a>	Circuits/Signals:Biomed Apps.	5	EECExxxx	EE Fundamentals	4/5						
	<a href="#">EECE2160</a>	Embedded Design Enabling Robotics	4	<a href="#">EECE2000</a>	Intro to Eng'g. Coop	1						
Year 2 BB Plan 2	<a href="#">MATH2341</a>	Diff. Eq./Lin. Alg.	4	Co-op	Co-op		Co-op		<a href="#">NU Core</a>	Social Science Lvl. 1	4	
	<a href="#">PHYS1155</a>	Physics 2 for Engrs.	3						Elective	General Elective 1	1	4
	<a href="#">PHYS1156</a>	Physics 2 Lab	1									
	<a href="#">PHYS1157</a>	ILS for PHYS1155	1									
	<a href="#">EECE2150</a>	Circuits/Signals:Biomed Apps.	4									
	<a href="#">EECE2151</a>	Lab for EECE2150	1									
	<a href="#">EECE2000</a>	Intro to Eng'g. Coop	1									
	<a href="#">EECE2160</a>	Embedded Design Enabling Robotics	3									
Year 3 AA Plan 1	Co-op			<a href="#">EECE3000</a>	Prof. Issues in Eng'g.	1	Elective	General Elective 1	1	4	Vacation	
				EECExxxx	CE Fundamentals	4	Elective	General Elective 2	2	4		
				Elective	EECE Tech Elective 1	4						
				EECExxxx	Graduate Course	4						
				EECExxxx	Graduate Course	4						
Year 3 BB Plan 2	<a href="#">CS1800</a>	Discrete Structures	4	Co-op	Co-op		Co-op		<a href="#">MATH3081</a>	Probability & Stats.	4	
	<a href="#">CS1801</a>	Recitation for CS1800	0						Elective	General Elective 2	2	4
	EECExxxx	CE Fundamentals	4/5									
	EECExxxx	CE Fundamentals	4/5									
	EECExxxx	EE Fundamentals	4/5									
Year 4 AA (to BB) Plan 1	Elective	EECE Tech Elective 2	4	Co-op	Co-op		Co-op		<a href="#">EECE4790</a>	Capstone Design 1	4	
	EECExxxx	Graduate Course	4						Elective	EECE Tech Elective 3	3	4
	EECExxxx	Graduate Course	4									
	<a href="#">*ENGW3302</a>	Adv. Writing for Prof.	4									
Year 4 BB (to ZH) Plan 2	<a href="#">EECE3000</a>	Prof. Issues in Eng'g.	1	Elective	EECE Tech Elective 2	2	<a href="#">EECE4790</a>	Capstone Design 1	4	Vacation		
	EECExxxx	CE Fundamentals	4	EECExxxx	Graduate Course	4	Elective	EECE Tech Elective 3	3			
	Elective	EECE Tech Elective 1	4	EECExxxx	Graduate Course	4						
	EECExxxx	Graduate Course	4	<a href="#">*ENGW3302</a>	Adv. Writing for Prof.	4						
	EECExxxx	Graduate Course	4									
Year 5 AA (to BB) Plan 1	<a href="#">EECE4792</a>	Capstone Design 2	4	EECExxxx	Graduate Course	4						
	EECExxxx	Graduate Course	4	EECExxxx	Graduate Course	4						
	EECExxxx	Graduate Course	4	Elective	EECE Tech Elective 4	4						
	Elective	General Elective 3	3									
Year 5 ZH Plan 2	Elective	EECE Tech Elective 4	4	<a href="#">EECE4792</a>	Capstone Design 2	4						
	EECExxxx	Graduate Course	4	EECExxxx	Graduate Course	4						
	EECExxxx	Graduate Course	4	EECExxxx	Graduate Course	4						
	Elective	General Elective 3	3									

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 (A maximum of 2 Graduate Courses can be used to fulfill this requirement)

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: 4 EECE technical electives:

(EECE2412-2530), EECE2750, EECE3154, (EECE3324-EECE3468), (EECE4512-EECE4698), (EECE4991-EECE4993), (EECE155-EECE5698), ENGR5670, GE4608

2 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.

NOTES:

Students will be required to meet with an undergraduate advisor to petition to enter the program.

Students are encouraged to meet with their financial aid counselor to review any financial questions.

4 semesters of coursework at Northeastern University must be completed with a minimum GPA of 3.2 to join the BS/MS program.

BS/MSECE program is 9.5 semesters of coursework.

Students who opt out of the MSECE part of the program will still need to complete the Spring semester of the fifth year to finish the capstone design project.