## **BACHELOR OF SCIENCE IN ELECTRICAL 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
	MATH1341	Calculus 1 for Engrs. 4	MATH1342	Calculus 2 for Engrs.	4					
	CHEM1151	General Chem for Engrs. 4	PHYS1151	Physics 1 for Engrs.	3					
	CHEM1153	Recitation for CHEM1151	PHYS1152	Physics 1 Lab	1					
Year 1	GE1000	Intro to Eng'g 1		ILS for PHYS1151	1		Vacation			Vacation
	GE1110	0.0	GE1111	Eng'g. Prob. Solv. & Comp.	4					
	NU Core	Arts Lvl. 1 OR Hum. Lvl. 1	ENGW1111	College Writing	4					
	MATH2341		MATH2321	Calculus 3 for Engrs.		Elective	EECE Tech Elective 1	4		
	PHYS1155	Physics 2 for Engrs. 3	EECExxxx	EE Fundamentals	4/5		Social Science Lvl. 1	4		
Year 2 AA	PHYS1156	Physics 2 Lab 1		EE Fundamentals	4/5					
Plan 1	PHYS1157	ILS for PHYS1155		CE Fundamentals	4/5					Со-ор
	EECE2150		EECE2000	Intro to Eng'g. Coop	1					
	EECE2160	Embedded Design Enabling Robotics 4								
	MATH2341	Diff. Eq./Lin. Alg. 4							NU Core	Social Science Lvl. 1
	PHYS1155	Physics 2 for Engrs. 3							Elective	General Elective 1
	PHYS1156	Physics 2 Lab								
Year 2 BB	PHYS1157	ILS for PHYS1155								
Plan 2	EECE2150	Circuits/Signals: Biomed App 4		Со-ор			Со-ор			
	EECE2151	Lab for EECE2150 1								
	EECE2000	Intro to Eng'g. Coop 1								
	EECE2160	Embedded Design: Enabling Robotic 3								
	EECE2161	Lab for EECE2160 1								
			EECE3000	Prof. Issues in Eng'g.	1	Elective	General Elective 1	4		
Year 3 AA			EECExxxx	EE Fundamentals	4	Elective	General Elective 2	4		
Plan 1		Co-op	EECE3468	Noise and Stoch Proc.	4					Vacation
Fiaii 1			EECExxxx	Graduate Course	4					
			EECExxxx	Graduate Course	4					
	MATH2321	Calculus 3 for Engrs. 4							Elective	EECE Tech Elective 1
Year 3 BB	EECExxxx	EE Fundamentals 4/5							Elective	General Elective 2
Plan 2	EECExxxx	EE Fundamentals 4/5		Со-ор			Со-ор			
	EECExxxx	CE Fundamentals 4/5								
	Elective	EECE Tech Elective 2 4							EECE4790	Capstone Design 1
Year 4 AA	EECExxxx	Graduate Course 4							Elective	EECE Tech Elective 3
(to BB)	EECEXXXX	Graduate Course 4		Со-ор			Со-ор		Liccurc	ELGE TECHT EIGENIVE 5
Plan 1		Adv. Writing for Prof. 4								
2	LITOTAGGE	7.dv. triting for 1.on								
	EECE3000	Prof. Issues in Eng'g. 1	Elective	EECE Tech Elective 2	4	EECE4790	Capstone Design 1	4		
Year 4 BB	EECExxxx	EE Fundamentals 4	Elective	EECE Tech Elective 3	4	Elective	EECE Tech Elective 4	4		
(to ZH)	EECE3468	Noise and Stoch Proc. 4	EECExxxx	Graduate Course	4					Vacation
Plan 2	EECExxxx	Graduate Course 4	EECExxxx	Graduate Course	4					
	EECExxxx	Graduate Course 4								
	EECE4792	Capstone Design 2	EECExxxx	Graduate Course	4					
Year 5 AA	EECExxxx	· =	EECExxxx	Graduate Course	4					
(to BB)	EECEXXXX	Graduate Course 4		EECE Tech Elective 4	4					
Plan 1	Elective	General Elective 3	Elective	EEGE TECH EIEGUVE 4	4					
	Elective		EECE4792	Capstone Design 2	4					
Year 5 ZH										
Plan 2	EECExxxx		EECExxxx	Graduate Course	4					
Pidii Z	EECExxxx	Graduate Course 4	EECExxxx	Graduate Course	4					
	*ENGW3302	Adv. Writing for Prof. 4	•						Desident Age	1. /2040
									Revised Marc	n/2U18

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 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

Technical Elective Requirements: 4 EECE technical electives

EECE2322, (EECE2540-EECE2750), EECE3154, (EECE3324-EECE3410), (EECE4512-EECE4698), (EECE4991-EECE4993), (EECE5515-EECE5698), GE4608, ENGR5670 CE Fundamentals not taken to meet the requirement may be taken as technical electives.

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-7: 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.