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	MATH1342	Calculus 2 for Engrs.	4	Vacation			Vacation
	CHEM1151	General Chem. for Engrs.	4	PHYS1165	Physics 2	4				
	CHEM1153	Recitation for CHEM1151	0	PHYS1166	Physics 2 Lab	1				
	PHYS1161	Physics 1	4	GE1111	Eng'g Prob. Solv. & Comp.	4				
	PHYS1162	Physics 1 Lab	1	ENGW1111	College Writing	4				
	GE1000	Intro to Eng'g	1							
	GE1110	Eng'g. Design	4							
Year 2 AA	MATH2321	Calculus 3 for Engrs.	4	PHYS2305	Thermo & Stat. Mech.	4	Vacation			Co-op
	MATH2341	Diff. Eq./Lin. Alg.	4	EECE2000	Intro to Eng'g. Coop	1				
	PHYS2303	Modern Physics	4	EECE2150	Circuits/Signals: Biomed Apps	4				
	EECE2160	Embedded Systems: Enabling Robotics	3	EECE2151	Lab for EECE2150	1				
	EECE2161	Lab for EECE2160	1	EECExxxx	CE Fundamentals	4/5				
				CS1800	Discrete Structures	4				
				CS1801	Recitation for CS1800	0				
Year 3 AA	Co-op			PHYS3602	Elect. & Magnetism	4	NU Core	Social Science Lvl. 1	4	Co-op
				EECExxxx	CE Fundamentals	4/5	PHYS3600	Adv. Physics Lab	4	
				EECExxxx	EE Fundamentals	4/5				
				*ENGW3302	Adv. Writing for Prof.	4				
Year 4 AA	Co-op			PHYS5115	Quantum Mechanics	4	EECE4790	Capstone 1	4	Co-op
				EECE3000	Prof. Issues in Eng'g.	1	Elective	EECE Tech Elective 1	4	
				EECExxxx	CE Fundamentals	4/5				
				NU Core	Arts Lvl 1 OR Hum. Lvl 1	4				
				MATH3081	Probability	4				
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: CY2550, (CS3200-CS3500), (CS3540-CS3800), (CS4100-CY4770), 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:

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