

**BACHELOR OF SCIENCE IN COMPUTER ENGINEERING
COMBINED MAJOR - COMPUTER ENGINEERING AND PHYSICS
CURRICULUM OUTLINE - CLASS OF 2024**

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	MATH2341	Diff. Eq./Lin. Alg.	4		
	CHEM1151	General Chem. for Engrs.	4	* PHYS1165	Physics 2	4	Elective	General Elective	4		
	CHEM1153	Recitation for CHEM1151	0	* PHYS1166	Physics 2 Lab	1					
	* PHYS1161	Physics 1	4	* PHYS1167	Recitation for PHYS1167	0					
	* PHYS1162	Physics 1 Lab	1	GE1502	Cornerstone of Engineering	4			Vacation		
	* PHYS1163	Recitation for PHYS1161	0	ENGW1111	College Writing	4					
	GE1000	Intro to Eng'g	1								
	GE1501	Cornerstone of Engineering 1	4								
Year 2 AA	MATH2321	Calculus 3 for Engrs.	4	PHYS4305	Thermo & Stat. Mech.	4					
	PHYS2303	Modern Physics	4	EECE2150	Circuits/Signals: Biomed App	5					
	EECE2160	Embedded Systems: Enabling Robotics	4	EECExxxx	CE Fundamentals	4/5			Vacation		
	Elective	General Elective	4	CS1800	Discrete Structures	4					
				CS1802	Recitation for CS1800	1					
Year 3 AA	PHYS3602	Elect. & Magnetism	4	* ENGW3302	Adv Writing in the Tech Prof <i>(to be taken online)</i>	4			PHYS3600	Adv. Physics Lab	4
	ENCP2000	Intro to Eng'g. Coop	1						EECE4790	Capstone 1	4
	EECExxxx	CE Fundamentals	4/5								
	EECExxxx	EE Fundamentals	4/5								
Year 4 AA	PHYS4115	Quantum Mechanics 1	4	EECExxxx	CE Fundamentals	4/5					
	EECE4792	Capstone Design 2	4	Elective	Adv. Physics Elective	4					
	MATH3081	Probability	4	Elective	EECE Tech Elective 2	4					
	ENCP3000	Prof. Issues in Eng'g.	1								
	Elective	EECE Tech Elective 1	4								

Revised May/2020

The Capstone Design Courses are taken as follows: (EECE4790 - Summer 1 and EECE4792 - Spring) OR (EECE4790 - Summer 2 and EECE4792 - Fall)

*** Substitutions**

[PHYS1151/1152/1153](#) are an acceptable substitution for [PHYS1161/1162/1163](#).

[PHYS1155/1156/1157](#) are an acceptable substitution for [PHYS1165/1166/1167](#).

[ENGW3315](#) is an acceptable substitution for [ENGW3302](#) 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

2 Required General Electives

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-EECE4698](#)), ([EECE4991- EECE4993](#)), ([EECE5115-EECE5698](#)), [GE4608](#), [ENGR5670](#)

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 speak with your academic advisor regarding possibilities of a second co-op, Dialogues of Civilization courses, and study abroad.

Please check with your advisor when taking a general elective in overlapping disciplines.

[Find your Academic Advisor](#)

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