

**BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING
COMBINED MAJOR - ELECTRICAL 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 CHEM1151 General Chem. for Engrs. 4 CHEM1153 Recitation for CHEM1151 0 *PHYS1161 Physics 1 4 *PHYS1162 Physics 1 Lab 1 *PHYS1163 Recitation for PHYS1161 0 GE1000 Intro to Eng'g 1 GE1501 Cornerstone of Engineering 1 4	MATH1342 Calculus 2 for Engrs. 4 *PHYS1165 Physics 2 4 *PHYS1166 Physics 2 Lab 1 *PHYS1167 Recitation for PHYS1167 0 GE1502 Cornerstone of Engineering 2 4 ENGW1111 College Writing 4	MATH2341 Diff. Eq./Lin. Alg. 4 Elective General Elective 4	Vacation
Year 2 AA	MATH2321 Calculus 3 for Engrs. 4 PHYS2303 Modern Physics 4 EECE2150 Circuits/Signals: Biomed Apps 5 Elective General Elective 4	PHYS4305 Therm & Stat. Mech. 4 EECE2160 Embedded Design: Enabling Robotics 4 EECExxxx EE Fundamentals 4/5 EECExxxx EE Fundamentals 4/5	Vacation	Vacation
Year 3 AA	ENCP2000 Intro to Eng'g. Coop 1 PHYS3602 Elect. & Magnetism 4 EECExxxx EE Fundamentals 4/5 EECExxxx CE Fundamentals 4/5 *ENGW3302 Adv. Writing for Prof. 4	Co-op	Co-op	EECE4790 Capstone 1 4 PHYS3600 Adv. Physics Lab 4
Year 4 AA	PHYS4115 Quantum Mechanics 1 4 EECE3468 Noise & Stoch. Proc. 4 EECE4792 Capstone Design 2 4 ENCP3000 Prof. Issues in Eng'g. 1	Elective EECE Tech Elective 1 4 Elective EECE Tech Elective 2 4 PHYSxxxx Adv. Physics Elective 4 Elective General Elective 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 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 courses.

3 Required General Electives

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

(CE Fundamentals not taken to meet the above requirement may also be taken as a technical elective)

Technical Elective Requirements: 2 EECE technical electives

EECE2322, (EECE2540-EECE2750), EECE3154, (EECE3324-EECE3410), (EECE4512-EECE4698), (EECE4991-EECE4993), (EECE5115-EECE5698), GE4608, ENGR5670

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.