

**BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING
COMBINED MAJOR - ELECTRICAL ENGINEERING AND PHYSICS
CURRICULUM OUTLINE - CLASS OF 2021, 2022, 2023, 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 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 GE1502 Cornerstone of Engineering 2 4 ENGW1111 College Writing 4 | Vacation | Vacation |
| Year 2 AA | MATH2321 Calculus 3 for Engrs. 4 MATH2341 Diff. Eq./Lin. Alg. 4 PHYS2303 Modern Physics 4 EECE2150 Circuits/Signals: Biomed Apps 5 | PHYS2305 Therm & Stat. Mech. 4 EECE2000 Intro to Eng'g. Coop 1 EECE2160 Embedded Design: Enabling Roboti 4 EECExxxx EE Fundamentals 4/5 Elective General Elective 4 | Vacation | Co-op |
| Year 3 AA | Co-op | PHYS3602 Elect. & Magnetism 4 EECExxxx EE Fundamentals 4/5 EECExxxx CE Fundamentals 4/5 * ENGW3302 Adv. Writing for Prof. 4 | Elective General Elective 4 PHYS3600 Adv. Physics Lab 4 | Co-op |
| Year 4 AA | Co-op | PHYS5115 Quantum Mechanics 4 EECE3000 Prof. Issues in Eng'g. 1 EECExxxx EE Fundamentals 4/5 EECE3468 Noise & Stoch. Proc. 4 Elective EECE Tech Elective 1 4 | Elective EECE Tech Elective 2 4 EECE4790 Capstone 1 4 | Co-op |
| Year 5 AA | Co-op | EECE4792 Capstone Design 2 4 PHYSxxxx Adv. Physics Elective 4 Elective General Elective 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.

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), (EECE5515-EECE5698), GE4608, ENGR5670

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.