LAKE SUPERIOR STATE UNIVERSITY

School of Engineering & Technology

B.S. Computer Engineering

Freshman (1st) Year - Fall Semester		2024
MATH-151	**Calculus I (Every)**	4
ENGL-110	First-Year Composition I (Every)	3
EGNR-101	Intro. to Engineering (Fall)	2
CHEM-115	General Chemistry (Every)	5
CSCI-105	**Intro. to Computer Programming (Every)**	3
		17

Freshman (1st) Year - Spring Semester		2025
MATH-152	**Calculus II (Every)**	4
ENGL-111	First-Year Composition II (Every)	3
EGNR-140	Linear Algebra Num. App. for Eng. (Every)	2
EGEE-125	**Digital Fundamentals (Spring)**	4
CSCI-121	**Principles of Programming (Spring)**	4
		17

Sophmore (2nd) Year - Fall Semester		2025
MATH-251	Calculus III (Every)	4
PHYS-231	**Applied Physics for Eng. and Sci. I (Fall)**	4
EGEE-250	Microcontroller Fundamentals (Fall)	4
CSCI-201	**Data Structures and Algorithms (Fall)**	4
		16

Sophmore (2nd) Year - Spring Semester		2026
PHYS-232	App. Physics for Eng. and Sci. II (Spring)	4
EGEE-210	**Circuit Analysis (Every)**	4
EGEE-355	Microcontroller Systems (Even Spring)	4
	Communication Elective	3
		15

Junior (3rd) Year - Fall Semester		2026
MATH-308	Probability and Math. Statistics (Fall)	3
EGEE-280	**Intro. to Signal Processing (Fall)**	4
EGEE-320	Digital Design (Even Fall)	4
	Discrete Math/Concentration/Tech. Elec.	4
		15

Junior (3rd) Year - Spring Semester		2027
MATH-310	Differential Equations (Every)	3
EGNR-346	Prob. and Stats Lab for Eng. (Spring)	1
EGNR-340	Numerical Methods for Eng. (Every)	1
	Discrete Math/Concentration/Tech. Elec.	3
	Humanities Elective	3
	Cultural Diversity Elective	3
		14

Senior (4th) Year - Fall Semester		2027
EGNR-491*	Engineering Design Project I (Fall)	3
EGEE-370	Electronic Devices (Fall)	4
	Concentration/Technical Elective	3
	Social Science Elective	3
	Humanities Elective	3
		16

Senior (4th) Year - Spring Semester		2028
EGNR-495*	Engineering Design Project II (Spring)	3
CSCI-434	Operating Systems Concepts (Even Spring)	3
	Concentration/Technical Elective	3
	Concentration/Technical Elective	3
	Social Science Elective	3
		15

Bolded courses require a grade of C or better for the degree

Minimum Total Credits: 125

General Technical Electives (13 credits minimum)

CSCI	265, 281 or higher
EGEE	310 or higher
EGEM	220, 320
EGME	275 or higher
EGNR	261
EGRS	235, 325, 365, 372, 375, 460
MATH	215 or higher

Any course from concentrations

Discrete Mathematics Core Electives (3 credits minimum)

EGEE-425	Digital Signal Processing (Odd Spring)	3
CSCI-341	Discrete Str. for Comp. Sci. (Even Fall)	4

Robotics & Automation Concentration		13
EGRS-381	**Robotics Technology Lab (Every)**	1
EGRS-385	**Robotics Engineering (Spring)**	3
EGRS-430	**Sys. Int. and Machine Vision (Fall)**	4
EGRS-435	**Automated Manufacturing Sys. (Spring)**	2
EGRS-481	**Manufacturing Automation Lab (Every)**	1
	Technical Elective	2

***Senior Sequence Options (Discuss with Advisor)**

Industrial	EGNR-491 & EGNR-495 as shown
Co-Op	EGNR-250, EGNR-450, EGNR-451, & EGNR-491
Research	EGNR-260, EGNR-460, & EGNR-461

Updated: 6/24/2024

This plan of study is a guide and not the offical list of requirements