B.S. Computer Engineering

with Minor in Computer Science **

2025-2026 Academic Year

Year 1		Year 2		Year 3		Year 4	
Fall (15 hrs)	Spring (16 hrs)	Fall (16 hrs)	Spring (13 hrs)	Fall (15 hrs)	Spring (17 hrs)	Fall (16 hrs)	Spring (12 hrs)
ECE 1000 * Intro to Electrical and Computer Engineering. 3 Credits. Offered F, Sp, Su. Req: MATH 1060 or higher	**ECE 2700 *** Digital Design I. 3 Credits. Offered F, Sp, Su. Req: MATH 1210	**ECE 2250 *** Circuit Theory. 3 Credits. Offered F, Sp, Su. Req: MATH 1210, PHYS 2220, ECE 1000	**ECE 3740** Digital Design II. 3 Credits. Offered F, Sp. Req: ECE 2700	**ECE 3710** Applied Prob. & statistics. 3 Credits. Offered F, Sp, Su. Req: MATH 1210	**ECE 4730** Embedded Systems II. 3 Credits. Offered Sp. Req: ECE 3730, 3740	**ECE 4700** Computer Architecture. 3 Credits. Offered F. Req: ECE 3740	**ECE 4800** CE Senior Design Project. 3 Credits. Offered F, Sp. Req: ECE 4900
CS 1400 * Fundamentals of Programming. 3 Credits. Offered F, Sp, Su. Req: MATH 1010 or higher	**ECE 2705 *** Digital Design I Lab. 1 Credit. Offered F, Sp, Su. CoReq: ECE 2705	**ECE 2255 *** Circuit Theory Lab. 1 Credit. Offered F, Sp, Su. CoReq: ECE 2250	**ECE 3760** Electronic Systems. 3 Credits. Offered F, Sp. Req: PHYS 2220, ECE 2250	**ECE 3730** Embedded Systems I. 3 Credits. Offered F, Sp. Req: ECE 2700, 2250	**ECE 4750** Digital Signal Processing. 3 Credits. Offered F, Sp. Req: ECE 3710, 3770	**ECE 4760** VLSI Design. 3 Credits. Offered F. Req: ECE 3760	**CE Elective II** Select any 3-credit course above CS 3060 or ECE 4780 or (Any of the courses defined for ECE Elective I if you have not taken as ECE Elective I
MATH 1210 * Calculus I. 4 Credits. Offered F, Sp, Su. Req: MATH 1050, 1060, or 1065	**MATH 1220 *** Calculus II. 4 Credits. Offered F, Sp, Su. Req: MATH 1210	**ECE 2750** Engineering Analysis. 3 Credits. Offered F, Sp. Req: MATH 1210, PHYS 2220, ECE 1000	**ECE 3765** Electronic Systems Lab. 1 Credit. Offered F, Sp. CoReq: ECE 3760	**ECE 3770** Signals and Systems. 3 Credits. Offered F, Sp. Req: ECE 2750	**ECE 4755** Digital Signal Processing Lab. 1 Credit. Offered F, Sp	**ECE 4765** VLSI Design Lab. 1 Credit. Offered F. Req: ECE 3760. CoReq: ECE 4760	**CS 3060** Operating Systems Theory. 3 Credits. Offered F, Sp, Su. Req: ECE 2700, ECE 3730
PHYS 2210 * Physics for Scientists and Engineers I. 4 Credits. Offered F, Sp, Su. Req: MATH 1210 or PHYS 1100	**PHYS 2220 *** Physics for Scientists and Engineers II. 4 Credits. Offered F, Sp, Su. Req: PHYS 2210 and MATH 1220	**CS 1410** Object Oriented Programming. 3 Credits. Offered F, Sp, Su. Req: CS 1400, MATH above 1050	**CS 2370** C++ Programming. 3 Credits. Offered F, Sp. Req: CS 1410	**CS 2300** Discrete Math Structures I. 3 Credits. Offered F, Sp, Su. Req: MATH 1050, CS 1410	**CE Elective I** Select a 4 credits course from CS (above CS 3060) or ECE 4810R or ECE 3250 or ECE 3350 or (ECE 3780 and ECE 3785)	Humanities Elective (COMM 1020 Recommended). 3 Credits.	Social and Behavioral Sci. (COMM 2110 Recommended). 3 Credits. Offered F, Sp, Su
PHYS 2215 * Physics for Scientists and Engineers I Lab. 1 Credit. Offered F, Sp, Su. CoReq: PHYS 2210	**PHYS 2225 *** Physics for Scientists and Engineers II Lab. 1 Credit. Offered F, Sp, Su. CoReq: PHYS 2220	American Institutions Elective. 3 Credits.	**Physical Science** Chem 1210 and 1215 recommended. 3 Credits.	**CS 2420** Intro to Algorithms and Data Structures. 3 Credits. Offered F, Sp, Su. Req: CS 1410	**ECE 4850** Machine Learning. 3 Credits. Offered Sp. Req: CS 1400, (ECE 3710 or STAT 2050)	Biology Elective. 3 Credits.	
	ENGL 1010 Introduction to Academic Writing. 3 Credits. Offered F, Sp, Su. Req: Test	**ENGL 2010** Intermediate Academic Writing. 3 Credits. Offered F, Sp, Su. Req: ACT Test or ENGL 1010			Personal, Professional, and Civic Growth. 3 Credits. Offered F, Sp, Su	Fine Arts Elective. 3 Credits.	

Program Admission (Matriculation)

- Complete * foundation courses with **C** or higher
- GPA ≥ **2.5**
- Submit Matriculation application to Dept.

Graduation requirements

- Complete 120 hrs (40 of which are upper division CE)
- GPA ≥2.5
- Complete ECE core and elective courses with C or higher
- Residency (≥30 hrs at UVU and ≥12 hrs in CE)
- Complete ≥10 hrs in ECE for the most recent 45 hrs earned
- Transfer credits <80 hrs total, and <20 hrs in ECE
- Complete one Global/Intercultural course and one WE course

Minoring in CS

** Students may minor in CS if two elective courses from CS 3100 or above are taken.

Color Key

Matriculation Reqs: **Green**
CE Core: **Yellow**
General Ed: **Grey**