

# B.S. Computer Engineering

(includes Minor in Electrical Engineering)

with optional Minor in Computer Science \*\*

2026-2027 Academic Year

Year 1		Year 2		Year 3		Year 4	
Fall (16 hrs)	Spring (16 hrs)	Fall (14 hrs)	Spring (13 hrs)	Fall (16 hrs)	Spring (17 hrs)	Fall (16 hrs)	Spring (12 hrs)
<b>ECE 1000 *</b> Intro to Electrical and Computer Engineering 3 Credits. Offered F, Sp, Su Req: MATH 1060 or higher	<b>ECE 2700 *</b> Digital Design I 3 Credits. Offered F, Sp, Su Req: MATH 1210, ECE 1000	<b>ECE 3710</b> Applied Prob. & statistics 3 Credits. Offered F, Sp, Su Req: MATH 1210	<b>ECE 2250 *</b> Circuit Theory 3 Credits. Offered F, Sp, Su Req: MATH 1210, PHYS 2220, ECE 1000	<b>ECE 3760</b> Electronic Systems 3 Credits. Offered F, Sp Req: PHYS 2220, ECE 2250	<b>ECE 4730</b> Embedded Systems II 3 Credits. Offered Sp Req: ECE 3730, 3740	<b>ECE 4700</b> Computer Architecture 3 Credits. Offered F Req: ECE 3740	<b>ECE 4800</b> CE Senior Design Project 3 Credits. Offered F, Sp Req: ECE 3740
<b>CS 1400 *</b> Fundamentals of Programming 3 Credits. Offered F, Sp, Su Req: MATH 1010 or higher	<b>ECE 2705 *</b> Digital Design I Lab 1 Credit. Offered F, Sp, Su CoReq: ECE 2705	<b>ECE 2750</b> Engineering Analysis 3 Credits. Offered F, Sp Req: MATH 1220, ECE 1000	<b>ECE 2255 *</b> Circuit Theory Lab 1 Credit. Offered F, Sp, Su CoReq: ECE 2250	<b>ECE 3765</b> Electronic Systems Lab 1 Credit. Offered F, Sp CoReq: ECE 3760	<b>ECE 4750</b> Digital Signal Processing 3 Credits. Offered F, Sp Req: ECE 3710, 3770	<b>ECE 4760</b> VLSI Design 3 Credits. Offered F Req: ECE 3760	<b>CE Elective II</b> 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
<b>MATH 1210 *</b> Calculus I 4 Credits. Offered F, Sp, Su Req: MATH 1050, 1060, or 1080	<b>MATH 1220 *</b> Calculus II 4 Credits. Offered F, Sp, Su Req: MATH 1210	<b>PHYS 2220 *</b> Physics for Scientists and Engineers II 4 Credits. Offered F, Sp, Su Req: PHYS 2210 and MATH 1220	<b>ECE 3740</b> Digital Design II 3 Credits. Offered F, Sp Req: ECE 2700	<b>ECE 3730</b> Embedded Systems I 3 Credits. Offered F, Sp Req: ECE 2700, 2250	<b>ECE 4755</b> Digital Signal Processing Lab 1 Credit. Offered F, Sp	<b>ECE 4765</b> VLSI Design Lab 1 Credit. Offered F Req: ECE 3765 CoReq: ECE 4760	<b>CS 3060</b> Operating Systems Theory 3 Credits. Offered F, Sp, Su Req: ECE 2700, ECE 3730
American Institutions Elective 3 Credits.	<b>PHYS 2210 *</b> Physics for Scientists and Engineers I 4 Credits. Offered F, Sp, Su Req: MATH 1210 or PHYS 1100	<b>PHYS 2225 *</b> Physics for Scientists and Engineers II Lab 1 Credit. Offered F, Sp, Su CoReq: PHYS 2220	<b>CS 2370</b> C++ Programming 3 Credits. Offered F, Sp Req: CS 1410	<b>ECE 3770</b> Signals and Systems 3 Credits. Offered F, Sp Req: ECE 2750	<b>CE Elective I</b> 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
<b>ENGL 1010</b> Introduction to Academic Writing 3 Credits. Offered F, Sp, Su Req: Test	<b>PHYS 2215 *</b> Physics for Scientists and Engineers I Lab 1 Credit. Offered F, Sp, Su CoReq: PHYS 2210	<b>CS 1410</b> Object Oriented Programming 3 Credits. Offered F, Sp, Su Req: CS 1400, MATH above 1050	Physical Science 3 Credits.	<b>CS 2300</b> Discrete Math Structures I 3 Credits. Offered F, Sp, Su Req: MATH 1050, CS 1410	<b>ECE 4850</b> Machine Learning 3 Credits. Offered Sp Req: CS 1400, (ECE 3710 or STAT 2050)	Biology Elective 3 Credits.	
	<b>ENGL 2010</b> Intermediate Academic Writing 3 Credits. Offered F, Sp, Su Req: ACT Test or ENGL 1010			<b>CS 2420</b> Intro to Algorithms and Data Structures 3 Credits. Offered F, Sp, Su Req: CS 1410	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 Requirements

Computer Engineering Core

General Education