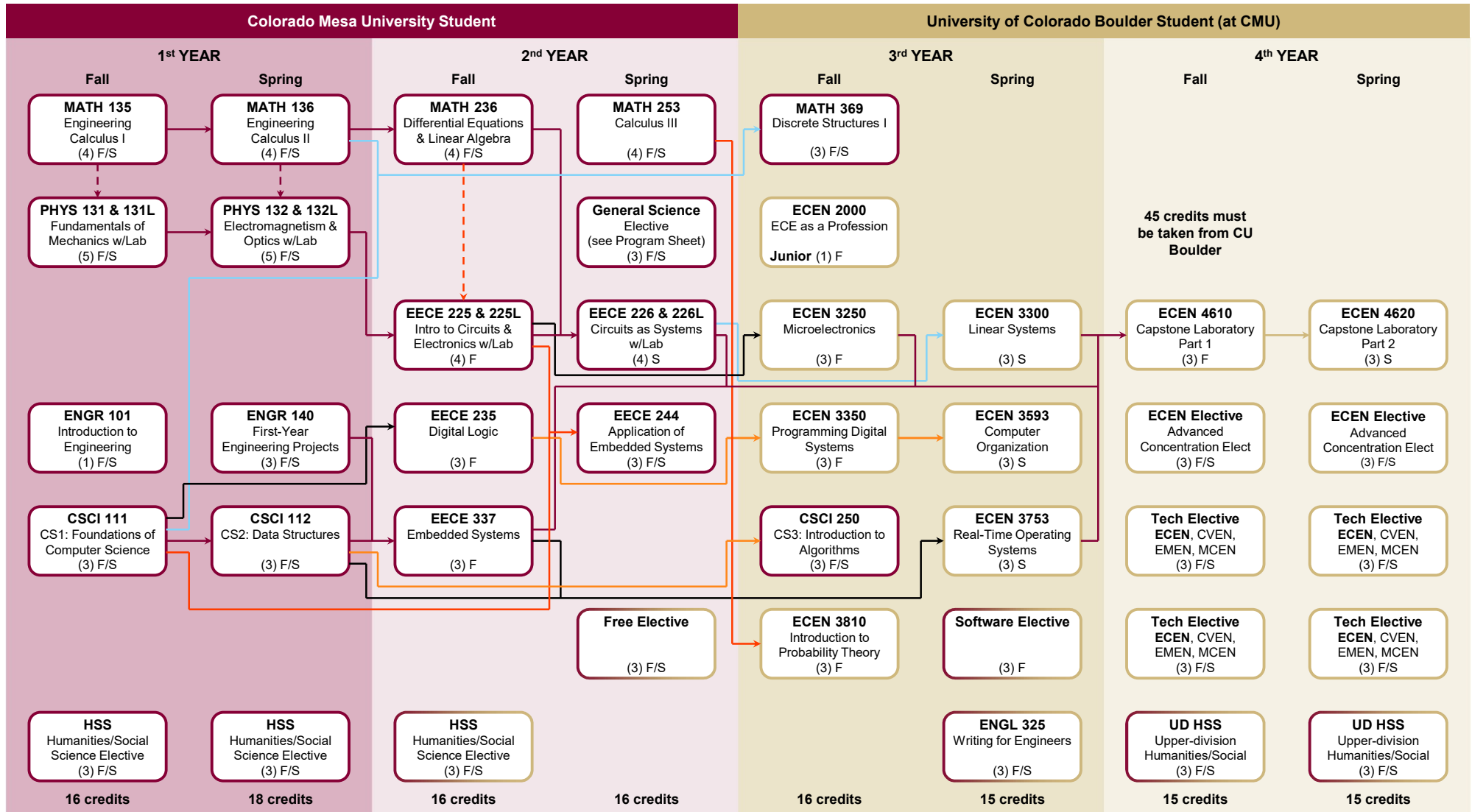


ELECTRICAL & COMPUTER ENGINEERING (BS)

Partnership Program

2026 – 2027



An accessible version of this flow chart is available on the following pages.

ELECTRICAL & COMPUTER ENGINEERING (BS) Partnership Program

Semester 1 (Fall)					
Courses	Credits	Semester	Pre-requisites, co-requisites, or notes		Post-requisites
MATH 135	Engineering Calculus I (sub: MATH 151)	4	Fall/Spring	MATH 119, or MATH 119A and MATH 119B, or math placement score	MATH 136, Co: PHYS 131, [CSCI 130]
PHYS 131	Fundamentals of Mechanics	4	Fall/Spring	MATH 151 or MATH 135 (either may be taken concurrently)	PHYS 132, 132L
PHYS 131L	Fundamentals of Mechanics Lab	1	Fall/Spring		
ENGR 101	Introduction to Engineering	1	Fall		
CSCI 111	CS1: Foundations of Computer Science (Sub: CSCI 130)	3	Fall/Spring	CSCI 110 or MATH 113 or MATH 119A	CSCI 112, EECE 235, 244, MATH 369
	Humanities/Social Science Elective	3	Fall/Spring	approved elective	
TOTAL		16			

Semester 2 (Spring)					
Courses	Credits	Semester	Pre-requisites, co-requisites, or notes		Post-requisites
MATH 136	Engineering Calculus II (sub: MATH 152)	4	Fall/Spring	MATH 135 or MATH 151	MATH 236, 369, Co: PHYS 132
PHYS 132	Electromagnetism & Optics	4	Fall/Spring	PHYS 131/PHYS 131L, and MATH 152 or MATH 136 (either may be taken concurrently)	EECE 225/225L
PHYS 132L	Electromagnetism & Optics Lab	1	Fall/Spring		
ENGR 140	First-Year Engineering Projects	3	Fall/Spring	MATH 119; or MATH 119A and MATH 119B	EECE 337
CSCI 112	CS2: Data Structures	3	Fall/Spring	CSCI 111 or CSCI 130	EECE 337, ECEN 3753
	Humanities/Social Science Elective	3	Fall/Spring	approved elective	
TOTAL		18			

Semester 3 (Fall)					
Courses	Credits	Semester	Pre-requisites, co-requisites, or notes		Post-requisites
MATH 236	Differential Equations & Linear Algebra	4	Fall/Spring	MATH 152 or MATH 136	EECE 226/226L Co: EECE 225/225L
EECE 225	Intro to Circuits & Electronics	3	Fall	PHYS 132/PHYS 132L; and MATH 236 (can be taken concurrently)	EECE 226/226L, 244 ECEN 3250
EECE 225L	Intro to Circuits & Electronics Lab	1	Fall		
EECE 235	Digital Logic	3	Fall	CSCI 111 or CSCI 130	ECEN 3350
EECE 337	Embedded Systems	3	Fall	CSCI 112 and ENGR 140	ECEN 3753, 4610
	Humanities/Social Science Elective	3	Fall/Spring	approved elective	
TOTAL		16			

Semester 4 (Spring)					
Courses	Credits	Semester	Pre-requisites, co-requisites, or notes		Post-requisites
MATH 253	Calculus III	4	Fall/Spring	MATH 136 or MATH 152	ECEN 3810
	General Science Elective	3	Fall/Spring	see Program Sheet	
EECE 226	Circuits as Systems	3	Spring	EECE 225 and MATH 236	ECEN 3300, 4610
EECE 226L	Circuits as Systems Lab	1	Spring		
EECE 244	Application of Embedded Systems	3	Spring	CSCI 111 or CSCI 130; and EECE 225/EECE 225L	
	Free Elective	3	Fall/Spring		
TOTAL		17			

ELECTRICAL & COMPUTER ENGINEERING (BS) Partnership Program**Semester 5 (Fall)**

Courses	Credits	Semester	Pre-requisites, co-requisites, or notes	Post-requisites
MATH 369 Discrete Structures I	3	Fall/Spring	MATH 152 or MATH 136; and CSCI 111 or CSCI 130	
ECEN 2000 Electrical & Computer Engineering as a Prof	1	Fall	Restricted to students with at least 27 credits (Sophomores, Juniors or Seniors)	
ECEN 3250 Microelectronics	3	Fall	EECE 225	ECEN 4610
ECEN 3350 Programming Digital Systems	3	Fall	EECE 235	ECEN 3593
CSCI 250 CS 3: Introduction to Algorithms	3	Fall	CSCI 112 and MATH 151 (may be taken concurrently)	Software electives
ECEN 3810 Introduction to Probability Theory	3	Fall	MATH 253	
TOTAL	16			

Semester 6 (Spring)

Courses	Credits	Semester	Pre-requisites, co-requisites, or notes	Post-requisites
ECEN 3300 Linear Systems	3	Spring	EECE 226	ECEN 4610
ECEN 3593 Computer Organization	3	Spring	EECE 226 or ECEN 3350	
ECEN 3753 Real-Time Operating Systems	3	Spring	EECE 337, CSCI 112	ECEN 4610
Software Elective	3	Fall/Spring	see Program Sheet	
ENGL 325 Writing for Engineers	3	Fall/Spring	or equivalent CU Boulder course such as ENES 3100, ENLP 3100, WRTG 3030, WRTG 3035, or PHYS 3050	
TOTAL	15			

Semester 7 (Fall)

Courses	Credits	Semester	Pre-requisites, co-requisites, or notes	Post-requisites
ECEN 4610 Capstone Laboratory Part 1	3	Fall	EECE 226, 337, (ECEN 3250 3300) or (ECEN 3753 3250) or (ECEN 3753 3300)	ECEN 4610
ECEN Advanced Concentration Elective	3	Fall/Spring	Most ECEN electives have 3000-level pre-requisites	
Technical Elective	3	Fall/Spring	Can be ECEN, CVEN, ECEN, EMEN 3000- or 4000-level	
Technical Elective	3	Fall/Spring	Can be ECEN, CVEN, ECEN, EMEN 3000- or 4000-level	
Upper-division Humanities/Social Science Elect	3	Fall/Spring	3000- or 4000-level approved elective	
TOTAL	15			

Semester 8 (Spring)

Courses	Credits	Semester	Pre-requisites, co-requisites, or notes	Post-requisites
ECEN 4620 Capstone Laboratory Part 2	3	Spring	ECEN 4620	
ECEN Advanced Concentration Elective	3	Fall/Spring	Most ECEN electives have 3000-level pre-requisites	
Technical Elective	3	Fall/Spring	Can be ECEN, CVEN, ECEN, EMEN 3000- or 4000-level	
Technical Elective	3	Fall/Spring	Can be ECEN, CVEN, ECEN, EMEN 3000- or 4000-level	
Upper-division Humanities/Social Science Elect	3	Fall/Spring	3000- or 4000-level approved elective	
TOTAL	15			