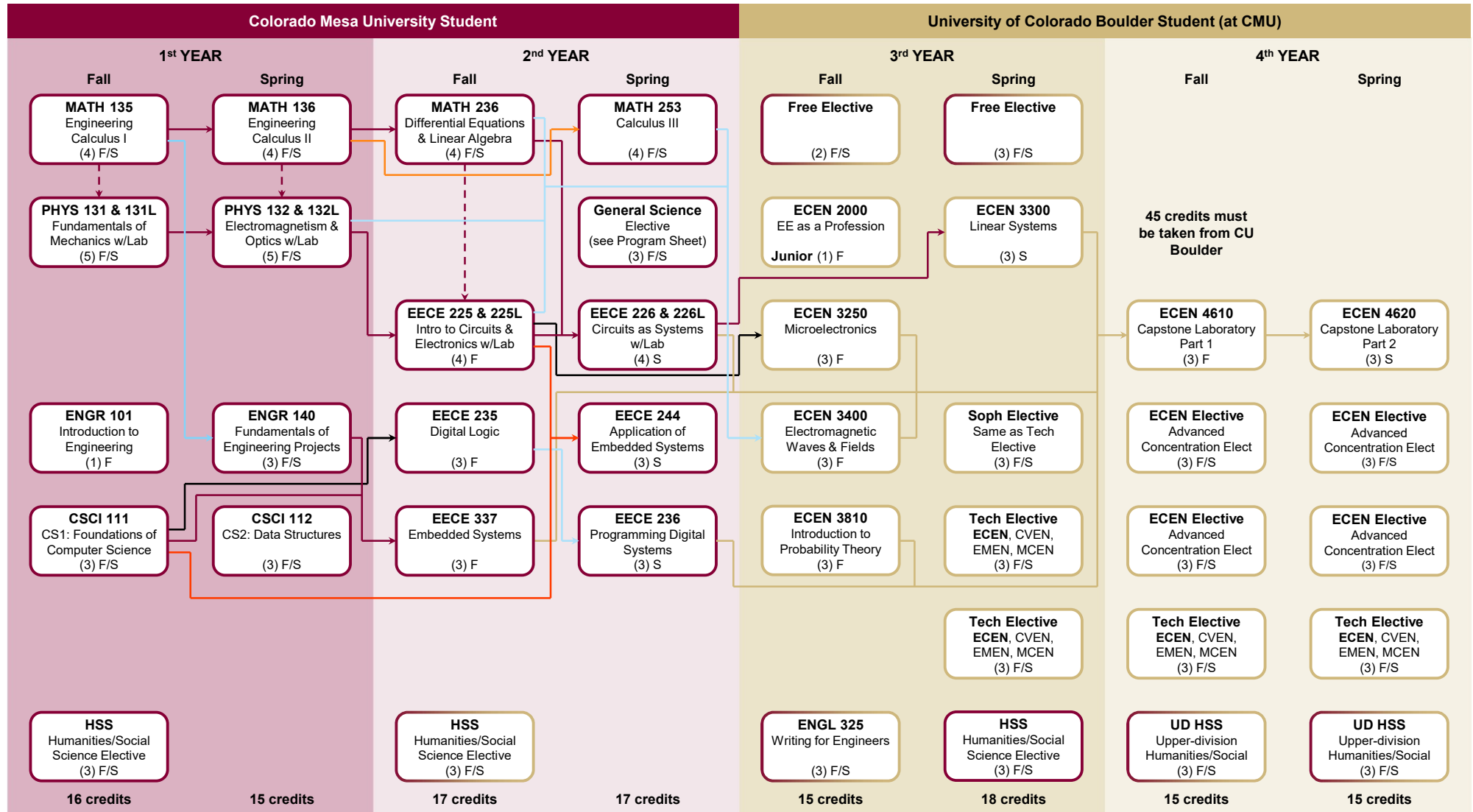


ELECTRICAL ENGINEERING (BS)

Partnership Program

2027–2028



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, 253, 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 Fundamentals of Engineering Projects	3	Fall/Spring	MATH 119; or MATH 119A and MATH 119B; or MATH 135 or MATH 151 (taken concurrently)	EECE 337
CSCI 112 CS2: Data Structures	3	Fall/Spring	CSCI 111 or CSCI 130	EECE 337, ECEN 3753
TOTAL		15		

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		17		

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	
EECE 236 Programming of Digital Systems	3	Spring	EECE 236	ECEN 4610
TOTAL		17		

ELECTRICAL & COMPUTER ENGINEERING (BS) Partnership Program

Semester 5 (Fall)					
Courses		Credits	Semester	Pre-requisites, co-requisites, or notes	Post-requisites
	Free Elective	2	Fall/Spring		
ECEN 2000	Electrical & Computer Engineering as a Prof	1	Fall	Restricted to students with at least 27 credits	
ECEN 3250	Microelectronics	3	Fall	EECE 225	ECEN 4610
ECEN 3400	Electromagnetic Waves & Fields	3	Fall	PHYS 132, EECE 225, MATH 236, MATH 253	ECEN 4610
ECEN 3810	Introduction to Probability Theory	3	Fall	MATH 253	
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 6 (Spring)					
Courses		Credits	Semester	Pre-requisites, co-requisites, or notes	Post-requisites
	Free Elective	3	Fall/Spring		
ECEN 3300	Linear Systems	3	Spring	EECE 226	ECEN 4610
	Sophomore Elective	3	Spring		
	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	
	Humanities/Social Science Elective	3	Fall/Spring	approved elective	
TOTAL		18			

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	
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	
	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	
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	
	Upper-division Humanities/Social Science Elect	3	Fall/Spring	3000- or 4000-level approved elective	
TOTAL		15			