ELECTRICAL ENGINEERING B.S.

UCCS University of Colorado Colorado Springs

ACADEMIC ADVISING

Partnering with students to successfully navigate college
Location: Main Hall 208
Phone: 719.255.3260
Website: Academic Advising

Connect With Your Advisor
Current UCCS Students
- Appointments: www.uccs.edu/advising/current-students

Prospective Students: www.uccs.edu/admissions/contact

GENERAL ACADEMIC INFORMATION

Minimum Graduation Requirements
- 128 credit hours
- 2.0 CU cumulative GPA
- Residency: Last 30 credit hours of degree must be completed while registered in the College Engineering & Applied Science at UCCS

Student Responsibilities
Students are required to know and follow:
- All academic policies set forth by the University, College, and academic department in the UCCS Catalog: catalog.uccs.edu
- All course prerequisites designated by the University. Failure to meet course prerequisites may result in an administrative drop of the course from a student's schedule. See degree audit for course prerequisites within the academic major.

DEGREE REQUIREMENTS

Explore Electrical Engineering: Bachelor of Science in Electrical Engineering | College of Engineering and Applied Science (uccs.edu)

Major Requirements

Electrical Engineering Core Courses (64 hours)	Course/Area	Course Title	Credit Hours
Requires a minimum of 64 credit hours of Core course work, with an additional 9 hours of Technical Electives.	ECE 1001 or ECE 1002**	Intro to Robotics	3
	ECE 2021	Computer Based Modeling	3
	ECE 1411*	Logic Circuits I	2
	ECE 2050	Intro to Physical Electronics	3
Requires a minimum of 52 credit hours of upper-division (3000-4999 level) course work.	ECE 2205	Circuits and Systems I	4
	ECE 2411*	Logic Circuits II	2
	ECE 2610*	Intro to Signals and Systems	4
	ECE 3020	Semiconductor Devices	3
	ECE 3110	Electromagnetic Fields I	3
A minimum GPA of 2.0 must be maintained on all courses taken in Electrical Engineering.	ECE 3205	Circuits and Systems II	4
	ECE 3210	Electronics I	3
	ECE 3220	Electronics II	3
*NOTE 1: A grade of "C" or better must be earned in courses marked with an asterisk (*).	ECE 3230	Electronics Lab I	1
	ECE 3240	Electronics Lab II	1
	ECE 3420	Microprocessor Systems Lab	1
	ECE 3430	Intro to Microcomputer Systems	3
**NOTE 2: ECE 1002 may be taken instead of 1001, but it will not fulfill a Writing Intensive course for Compass Curriculum.	ECE 3610	Engineering Probability and Statistics	3
	ECE 4890	Senior Seminar *(Must be taken semester prior to ECE 4898)*	1
	ECE 4898	Senior Design Project	3
You must be admitted into the College of Engineering in order to take any 2000-level or higher ECE coursework.	EE Electives - Lectures	*Complete 12 hours from the following courses:* ECE 3120, 4020, 4162, 4242, 4340, 4480, 4510, 4625, 4650, 4910	12
	EE Electives - Labs	*Complete 2 hours from the following courses:* ECE 3440, 4040, 4150, 4160, 4200, 4530, 4560, 4670, 4680	2

Technical Electives (9 hours)	Complete 9 hours from the following courses (or ECE courses at the 3000-4000 level, except ECE 3001): BIOL 3000, 3020, 3100, 3140, 3220, 3610, 3700, 3830, 3910, CHEM 3001, 3002, 3101, 3102, 3111, 3112, 3203, 3213, 4521, CS 3010, 3060, 3160, 3300, HPNU 3300, MAE 3130, 3201, 3401, MATH 3110, 3130, 3410, 3500, 3510, PES 3060, 3130, 3210, 3410, 3650, 3670 **NOTE:** Other courses in CS, ECE, MAE, MATH and PES numbered 3000+ (except MATH 3010 and 3020) may be accepted with approval prior to taking the course.

ELECTRICAL ENGINEERING B.S.

UCCS | University of Colorado Colorado Springs

General Education and Elective Requirements

Core Writing Requirement (6 hours)	• ENGL 1310 ENGL 1310, 1308, or 1305 *(Students choosing ENGL 1305 must complete ENGL 1300 first.)* • TCID 2090 • PORT 3000 (0 Credits) – Writing Portfolio
Mathematics (18 hours)	• MATH 1350 • MATH 1360 • MATH 2350 • MATH 3400 • MATH elective numbered 3110 or higher (except MATH 3810)
Basic Science (16 hours)	• PES 1110 • PES 1120 • PES 2130 • 5 hours from: BIOL 1300, 1310, 1350, 1360, CHEM 1401, 1402, 1411, 1412, GEOL 1010, 1020, or any additional PES course with a prerequisite of PES 1110.
Humanities/Social Science Electives (15 hours)	See the degree audit for course options. The Gateway course GPS 1010 counts towards Humanities/Social Science Electives.

Compass Curriculum (0 hours)	Component	Course
• Explore and Navigate courses must be outside major requirements • Writing Intensive, Inclusiveness, and Sustainability courses can count towards other requirements within degree	Gateway	GPS 1010
	Explore – Arts, Humanities and Cultures	See Degree Audit (counts towards HUM/SS Electives)
	Explore – Society, Behavior and Health	See Degree Audit (counts towards HUM/SS Electives)
	Explore – Physical and Natural World	PES 1110 (included in Basic Science requirement)
	Navigate	See Degree Audit (can count towards HUM/SS Electives)
	Summit	ECE 4890/4898
	Writing Intensive Courses (WIC) *Two courses with one upper-division (3000+ level)*	• ECE 3610 • ECE 1001
	Inclusiveness	See Degree Audit
	Sustainability	See Degree Audit

FOUR-YEAR DEGREE PLAN

Please note that this is an *example* degree program and your program may vary. **Students are responsible for completing all course prerequisites.**

Year One

√	FALL	Hours	√	SPRING	Hours
	ECE 1001	3		ECE 2021	3
	ECE 1411	2		MATH 1360	4
	MATH 1350	4		ENGL 1310	3
	PES 1110	4		PES 1120	4
	GPS 1010	3		Explore – Society, Behavior & Health Course	3
	TOTAL	16		**TOTAL**	17

Year Two

√	FALL	Hours	√	SPRING	Hours
	ECE 2610	4		ECE 2050	3
	MATH 2350	4		ECE 2205	4
	Basic Science Elective (w/lab)	5		MATH 3400	3
	TCID 2090	3		PES 2130	3
				ECE 2411	2
	TOTAL	16		**TOTAL**	15

Year Three

√	FALL	Hours	√	SPRING	Hours
	ECE 3020	3		ECE 3110	3
	ECE 3205	4		ECE 3220	3
	ECE 3210	3		ECE 3240	1
	ECE 3230	1		ECE 3610	3
	ECE 3420	1		Electrical Engineering Lab Elective	1
	ECE 3430	3		Technical Elective	3
	Electrical Engineering Elective	3		HUM/SS Elective (*Inclusiveness*)	3
				PORT 3000	
	TOTAL	18		**TOTAL**	17

Year Four

√	FALL	Hours	√	SPRING	Hours
	ECE 4890	1		ECE 4898	3
	Electrical Engineering Elective	3		Electrical Engineering Elective	3
	Electrical Engineering Lab Elective	1		Electrical Engineering Elective	3
	MATH Elective (3110+)	3		Technical Elective	3
	Technical Elective (*Navigate*)	3		Explore – Arts, Humanities & Cultures Course	3
	HUM/SS Elective (*Sustainability*)	3			
	TOTAL	14		**TOTAL**	15