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 (68 hours)	**Course/Area**	**Course Title**	**Credit Hours**
	ECE 1001 or ECE 1002**	Intro to Robotics	3
Requires a minimum of 46 credit hours of Core course work, with an additional 22 hours of ECE electives.	ECE 1411*	Logic Circuits I	3
	ECE 2021	Computer Based Modeling in C	3
	ECE 2205	Circuits and Systems I	4
	ECE 2411*	Logic Circuits II	3
Requires a minimum of 48 credit hours of upper-division (3000-4999 level) course work.	ECE 2610*	Intro to Signals and Systems	4
	ECE 3020	Semiconductor Devices	3
	ECE 3110	Electromagnetic Fields I	3
	ECE 3205	Circuits and Systems II	4
A minimum GPA of 2.0 must be maintained on all courses taken in Electrical Engineering.	ECE 3210	Electronics I	3
	ECE 3220	Electronics II	3
	ECE 3230	Electronics Lab I	1
NOTE 1: A grade of "C" or better must be earned in courses marked with an asterisk (*).	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 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.	ECE Exit Interview	*Complete the ECE Exit Interview with the Chair of the ECE Department during the final semester of course work. Contact the ECE department office for more information.*	0
Electrical Engineering Electives (22 hours)	ECE Electives - Lectures	*Complete 12 hours from the following courses:* ECE 3120, 4020, 4162, 4242, 4340, 4480, 4510, 4625, 4650, 4910	12
	ECE Electives - Labs	*Complete 2 hours from the following courses:* ECE 3440, 4040, 4150, 4160, 4200, 4530, 4560, 4670, 4680	2
	ECE Electives – Additional	Complete an additional 8 hours of upper-division (3000+ level) ECE courses. Students must complete all prerequisites for the electives. **NOTE:** Up to 6 credit hours of BIOL, CHEM, CS, MAE, MATH and PES courses numbered 3000-level or higher may be accepted with a petition completed prior to taking the course (except MATH 3010, 3020, and 3810).	8

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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 (21 hours)	• MATH 1350 • MATH 1360 • MATH 2350 • MATH 3400 • MATH elective numbered 3110 or higher (except MATH 3810) • ECE 3610
Basic Science (15 hours)	• PES 1110 • PES 1120 • PES 1160 • PES 2130 • ECE 2050
Humanities/Social Science Electives (15 hours)	See the degree audit for course options

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 (included in major requirements)
	Writing Intensive Courses (WIC) *Two courses with one upper-division (3000+ level)*	• ECE 1001 • ECE 3610
	Inclusiveness	See Degree Audit (can count towards HUM/SS Electives)
	Sustainability	See Degree Audit (can count towards HUM/SS Electives)

Open Electives (3 hours)	Complete 3 hours of open electives from any discipline. *May not include MATH 1040, 1050 or 1120.*

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 *(Writing Intensive)* or 1002	3		ECE 2021	3
	ECE 1411	3		MATH 1360	4
	MATH 1350	4		ENGL 1310	3
	GPS 1010 *(Hum/SS elective)*	3		PES 1110	4
	Explore – Society, Behavior & Health Course *(Hum/SS elective)*	3		PES 1160	1
	TOTAL	16		**TOTAL**	15

Year Two

√	FALL	Hours	√	SPRING	Hours
	ECE 2610	4		ECE 2050	3
	MATH 2350	4		ECE 2205	4
	PES 1120	4		ECE 2411	3
	TCID 2090	3		PES 2130	3
	Explore – Arts, Humanities & Cultures *(Hum/SS elective)*	3		MATH 3400	3
	TOTAL	18		**TOTAL**	16

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 *(Writing Intensive)*	3
	ECE 3420	1		ECE Elective - Lecture	3
	ECE 3430	3		ECE Elective - Lab	1
	PORT 3000	0		ECE Elective - Additional	3
	TOTAL	15		**TOTAL**	17

Year Four

√	FALL	Hours	√	SPRING	Hours
	ECE 4890 *(Summit Course)*	1		ECE 4898 *(Summit Course)*	3
	ECE Elective - Lecture	3		ECE Elective - Lecture	3
	ECE Elective - Lab	1		ECE Elective - Lecture	3
	ECE Elective - Additional	2		ECE Elective - Additional	3
	MATH Elective (3110+)	3		HUM/SS Elective *(Inclusiveness)*	3
	Open Elective *(Navigate)*	3		ECE Exit Interview	0
	HUM/SS Elective *(Sustainability)*	3			
	TOTAL	16		**TOTAL**	15