COMPUTER 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

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

Major Requirements			
Computer Engineering Major (62 hours) - Requires a minimum of 62 credit hours of Core course work, with an additional 9 hours of Technical Electives. - Requires a minimum of 42 credit hours of upper-division (3000-4999 level) course work. - A minimum GPA of 2.0 must be maintained on all courses taken in Computer Engineering. ***NOTE 1:** A grade of "C" or better must be earned in courses marked with an asterisk (*). ****NOTE 2:** ECE 1002 may be taken instead of 1001, but it will not fulfill a Writing Intensive course for Compass Curriculum. *You must be admitted into the College of Engineering in order to take CS 1450 or any 2000-level or higher ECE or CS coursework.*	**Course/Area**	**Course Title**	**Credit Hours**
	CS 1150*	Principles of Computer Science	3
	CS 1450*	Data Structures & Algorithms	3
	CS 2060	Programming with C	3
	CS 2080	Programming with UNIX	3
	CS 3060	Object Oriented Programming with C++	3
	CS 3300	Software Engineering	3
	CS 4500	Operating Systems	3
	CS 4720	Design & Analysis of Algorithms	3
	ECE 1001 or ECE 1002**	Intro to Robotics	3
	ECE 1411*	Logic Circuits I	3
	ECE 2205	Circuits and Systems I	4
	ECE 2411*	Logic Circuits II	3
	ECE 2610*	Intro to Signals and Systems	4
	ECE 3210	Electronics I	3
	ECE 3420	Microprocessor Systems Lab	1
	ECE 3430	Intro to Microcomputer Systems	3
	ECE 3440	Microcomputer Systems Lab	1
	ECE 4242	Advanced Digital Design Methods	3
	ECE 4330	Embedded System Design	3
	ECE 4480	Computer Architecture & Design	3
	ECE 4891	Senior Seminar	1
	ECE 4899	Senior Design Project	3
	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
ECE or CS Electives (9 hours)	Complete 9 credit hours of unused upper-division ECE courses (3000- or 4000-level) or choose from the list below: CS 3010, 3020, 3160, 3350, 4100, 4220, 4420, 4600, 4700, 4800, 4820, MATH 3130 **NOTE:** Additional 4000-level courses in CS, MAE, MATH and PES may be accepted with approval prior to taking the course.		9

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General Education and Elective Requirements

Core Writing Requirement (6 hours)	• 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 2150 **or** CS 2150 • MATH 2350 • MATH 3400 • ECE 3610
Basic Science (12 hours)	• PES 1110 • PES 1120 • PES 1160 • 3 hours from: CHEM 1401, 1402, 1411, 1412, or any additional PES course with a PES 1110 prerequisite.
Humanities/Social Science Electives (15 hours)	See degree audit for course options.

Compass Curriculum (0 hours)	Component	Course
• Explore and Navigate courses must be from a department other than the major.	**Gateway Program Seminar**	GPS 1010 (counts towards HUM/SS Electives)
	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)
• Writing Intensive, Inclusiveness, Sustainability and Navigate courses can double count toward other degree requirements.	**Explore** – Physical and Natural World	PES 1110 (included in Basic Science requirement)
	Navigate	See Degree Audit (can count towards HUM/SS Electives)
	Summit	ECE 4891/4899 (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
	CS 1150	3		CS 1450	3
	ECE 1001 *(Writing Intensive)* or 1002	3		CS 2060	3
	ECE 1411	3		MATH 1360	4
	MATH 1350	4		PES 1110	4
	GPS 1010 *(Hum/SS elective)*	3		PES 1160	1
	TOTAL	16		**TOTAL**	15

Year Two

√	FALL	Hours	√	SPRING	Hours
	CS 2080	3		CS 3060	3
	ECE 2411	3		ECE 2205	4
	ECE 2610	4		MATH 3400	3
	MATH 2350	4		PES 1120	4
	ENGL 1310	3		TCID 2090	3
	TOTAL	17		**TOTAL**	17

Year Three

√	FALL	Hours	√	SPRING	Hours
	ECE 3210	3		CS 3300	3
	ECE 3420	1		ECE 3440	1
	ECE 3430	3		ECE 3610 *(Writing Intensive)*	3
	ECE 4242	3		ECE 4480	3
	MATH 2150	3		Basic Science Elective	3
	Explore – Arts, Humanities & Cultures *(Hum/SS elective)*	3		Explore – Society, Behavior, and Health *(Hum/SS elective)*	3
				PORT 3000	0
	TOTAL	16		**TOTAL**	16

Year Four

√	FALL	Hours	√	SPRING	Hours
	CS 4500	3		ECE 4899 *(Summit Course)*	3
	CS 4720	3		ECE or CS Elective	3
	ECE 4330	3		ECE or CS Elective	3
	ECE 4891 *(Summit Course)*	1		HUM/SS Elective *(Inclusiveness)*	3
	ECE or CS Elective	3		Open Elective *(Navigate)*	3
	HUM/SS Elective *(Sustainability)*	3		ECE Exit Interview	0
	TOTAL	16		**TOTAL**	15