COMPUTER ENGINEERING B.S.



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: <u>catalog.uccs.edu</u>
- 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	Course/Area	Course Title	Credit Hours			
(63 hours)	CS 1150*	Principles of Computer Science	3			
	CS 1450*	Data Structures & Algorithms	3			
Requires a minimum of 63 credit	CS 2060	Programming with C	3			
hours of Core course work, with an additional 10 hours of Technical	CS 2080	Programming with UNIX	3			
Electives.	CS 3060	Object Oriented Programming with C++				
	CS 3300	Software Engineering	3			
Requires a minimum of 46 credit	CS 4500	Operating Systems	3			
hours of upper-division (3000-	CS 4720	Design & Analysis of Algorithms	3			
4999 level) course work.	ECE 1001 or ECE 1002**	Intro to Robotics	3			
A minimum GPA of 2.0 must be	ECE 1411*	Logic Circuits I	2			
maintained on all courses taken in Computer Engineering.	ECE 2205	Circuits and Systems I	4			
Computer Engineering.	ECE 2411*	Logic Circuits II	2			
NOTE 1: A grade of "C" or better must	ECE 2610	Intro to Signals and Systems	4			
be earned in courses marked with an	ECE 3210	Electronics I	3			
asterisk (*).	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	ECE 3440	Microcomputer Systems Lab	1			
Writing Intensive course for Compass	ECE 3610	Engineering Probability and Statistics	3			
Curriculum.	ECE 4242	Advanced Digital Design Methods	3			
	ECE 4330	Embedded System Design	3			
You must be admitted into the College of	ECE 4480	Computer Architecture & Design	3			
Engineering in order to take any 2000-	ECE 4891	Senior Seminar	1			
level or higher ECE or CS coursework.	ECE 4899	Senior Design Project	3			
Technical Electives (10 hours)	S Complete 10 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 p to taking the course.						

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G	eneral Education and Elective F	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 MATH 1350 MATH 2150 MATH 2350 MATH 3400 			
Mathematics (18 hours)				
Basic Science (14 hours)	 PES 1110 PES 1120 6 hours from: CHEM 1401, 1402, 1411, 1412, GEOL 1010, 1020, any course with a PES 1110 prerequisite. 			
Humanities/Social Science Electives (15 hours)	See the degree audit for course options. The Gateway Electives.	course GPS 1010 counts towards Humanities/Social Science		
Compass Curriculum	Component	Course		
(0 hours)	Gateway	GPS 1010 (counts towards HUM/SS Electives)		
Explore and Navigate courses must be	Explore – Arts, Humanities and Cultures	See Degree Audit (counts towards HUM/SS Electives)		
outside major requirements	Explore – Society, Behavior and Health	See Degree Audit (counts towards HUM/SS Electives)		
Writing Intensive, Inclusiveness, and	Explore – Physical and Natural World	PES 1110 (included in Basic Science requirement)		
Sustainability courses can count	Navigate	See Degree Audit (can count towards HUM/SS Electives)		
towards other requirements within	Summit	ECE 4891/4899 (included in Computer Engineering Core requirement)		
degree	Writing Intensive Courses (WIC)	• ECE 3610		
	Two courses with one upper-division (3000+ level)	• ECE 1001		
	Inclusiveness	See Degree Audit		
	Sustainability	See Degree Audit		
Open Electives (2 hours)	Complete 2 hours of open electives from any discipline. May not include MATH 1040, 1050 or 1120.			

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FOUI		AR DEGREE PLAN				
1	Ple	ease note that this is an example degree program and your pro		Stud	lents are responsible for completing all course prerequisites.	
a)	J	FALL	Hours	J	SPRING	Hours
		CS 1150	3		CS 1450	3
Ľ		ECE 1001 or 1002	3		CS 2060	3
Ī		ENGL 1310	3		MATH 1360	4
Year One		GPS 1010	3		PES 1110	4
_		MATH 1350	4		TCID 2090	3
		TOTAL	16		TOTAL	17
	./	FALL	Hours	./	SPRING	Hours
		CS 2080	3	· ·	CS 3060	3
8		ECE 1411	2		ECE 2205	4
-		ECE 2610	4		ECE 2411	2
Year Two		MATH 2350	4		MATH 3400	3
× ×		PES 1120	4		Explore – Society, Behavior & Health Course (<i>Inclusiveness</i>)	3
		TOTAL	17		TOTAL	15
	1	1,5111		·	1	
	J	FALL	Hours	J	SPRING	Hours
		ECE 3210	3		CS 3300	3
e,		ECE 3420	1		ECE 3440	1
Ĭ		ECE 3430	3		ECE 3610	3
Ę		ECE 4242	3		ECE 4480 or CS 4200	3
Year Three		MATH 2150	3		Basic Science Elective	4
>		Explore – Arts, Humanities & Cultures Course	3		HUM/SS Elective (Navigate)	3
		PORT 3000	0			0
		TOTAL	16		TOTAL	17
	J	FALL	Hours	J	SPRING	Hours
	· ·	CS 4500	3	\ \ \	ECE 4899 – Senior Design Project	3
\ ≒		CS 4720	3		Technical Elective	3
Year Four		ECE 4330	3		Technical Elective	4
		ECE 4891	1		Basic Science Elective	2
		Technical Elective	3		Open Elective	2
		HUM/SS Elective (Sustainability)	3			†
		TOTAL	16		TOTAL	14