COMPUTER SCIENCE 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

- 120 credit hours
- 45 upper-division credit hours (3000-4999 level)
- 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 Science: Computer Science Home | College of Engineering and Applied Science (uccs.edu)

	Comp	uter Science Requirements	
Computer Science Core Courses	Course/Area	Course Title	Credit Hours
(43 hours)	CS 1150	Principles of Computer Science	3
	CS 1450	Data Structures & Algorithms	3
Requires a minimum of 43 credit	CS 2060	Programming in C	3
hours of core CS course work with an additional 12 hours in a required	CS 2080	Programming with UNIX	3
Specialty Area.	CS 2160	Computer Org. & Assembly Language	3
Specialty Area.	CS 3050	Social & Ethical Implications of Computing	1
Requires a minimum of 37 credit	CS 3020,	Adv Object Tech Using C#/.NET.C#	3
hours of upper-division (3000-4999	CS 3060,	Object Oriented Programming in C++	
level) CS course work.	or	or	
	CS 3080	Python Programming	
All CS Core and Mathematics	CS 3160	Concepts of Programming Languages	3
courses must be completed with a	CS 3300	Software Engineering	3
grade of "C" or better.	CS 4200	Computer Architecture I	3
	CS 4220	Computer Networks	3
You must be admitted into the College of	CS 4300	Advanced Software Engineering	3
Engineering to take CS 1450 or any 2000-	CS 4500	Operating Systems I	3
level or higher CS coursework.	CS 4720	Design & Analysis of Algorithms	3
	CS 4910	Introduction to Computer Security	3
Specialty Area	Advanced	Complete 12 credit hours from the following courses:	12
(12 hours)	Software	CS 3110, 4310, 4320, 4340, 4350, 4410	
	Engineering		
 Students are required to complete 	Artificial	Complete 12 credit hours from the following courses:	12
one of the specialty areas listed.	Intelligence and Machine	CS 3820, 3840, 3850, 4410, 4435, 4440, 4460, 4710, 4730, 4820, 4860, 4870, 4890	
Commentally and a second	Learning	4050	
Some specialty areas require additional advanced mathematics	Computer	Complete 12 credit hours from the following courses:	12
courses. Students should carefully	Systems and	CS 3910, 4420, 4740, ECE 4330	12
check prerequisites when deciding	Networking		
on a track.	Cybersecurity	Complete 12 credit hours from the following courses:	12
		CS 2910, 3910, 3920, 4915, 4920, 4930, 4940, 4950, 4980, 4985	
	General	Complete 12 credit hours of UNUSED upper-division (3000+ level) CS courses in	12
		consultation with your faculty advisor. At least 6 hours must be 4000-level or	
		higher.	
		NOTE: Internships, Independent Studies, and similar courses cannot be taken for this requirement.	
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G	General Education and Elective F	Requirements				
Core Writing Requirement (6 hours)	 ENGL 1310, 1308, or 1305 (Students choosing ENGL 1305 must complete ENGL 1300 first.) or ENGL 1410 TCID 2090 Writing Portfolio – PORT 3000 (0 credits) or PORT 4000 (1 credit) or alternative – See Degree Audit 					
Mathematics (17 hours) Courses must be completed with a grade of "C" or better.	 MATH 1350 MATH 1360 CS 2020 or MATH 3810 CS 2150 or MATH 2150 CS 2300 or MATH 3130 					
Basic Science (9-10 hours)	Complete all of the Basic Science sequence courses lis Chemistry - CHEM 1401, 1402, 1411, 1412 (10 ho Physics - PES 1110, 1120, and 1160 (9 hours)	, ,				
Compass Curriculum	Component	Course				
(9 hours)	Gateway	GPS 1010				
 Explore and Navigate courses must be 	Explore – Arts, Humanities and Cultures	See Degree Audit				
taken in departments other than the	Explore – Society, Behavior and Health	See Degree Audit				
major.	Explore – Physical and Natural World	CHEM 1401 or PES 1110 (included in Basic Science requiremen				
Writing Intensive, Inclusiveness, and	Navigate	See Degree Audit				
Sustainability courses may count	Summit	CS 4300 (included in major requirements)				
•	Writing Intensive Courses (WIC)	CS 3050 (included in major requirements)				
toward other requirements within the	Two courses with one upper-division (3000+ level)	See Degree Audit				
degree.	Inclusiveness	See Degree Audit				
	Sustainability	See Degree Audit				
General Electives (24 hours)						

FOUR-YEAR DEGREE PLAN

UD General Elective (Navigate)

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

Year One	J	FALL	Hours	1	SPRING	Hours
		CS 1150	3		CS 1450	3
		ENGL 1310 or 1410	3		CS 2060	3
		GPS 1010	3		Explore – Arts, Humanities & Cultures Course	3
		MATH 1350	4		MATH 1360	4
		Explore – Society, Behavior & Health Course	3		General Elective	3
		TOTAL	16		TOTAL	16
Year Two	J	FALL	Hours	1	SPRING	Hours
		CS 2080	3		CS 2020 or MATH 3810	3
		CS 2160	3		CS 2300 or MATH 3130	3
		CS 2150 or MATH 2150	3		CS 3020, CS 3060 or CS 3080	3
		TCID 2090	3		CS 3050	1
		Basic Science Sequence Course I w/lab	5		Basic Science Sequence Course II	4-5
		TOTAL	17		TOTAL	14-15
	J	FALL	Hours	J	SPRING	Hours
		CS 3160	3		CS 3300	3
Year Three		CS 4220	3		CS 4200	3
		CS 4720	3		CS Specialty Area Course	3
		General Elective (Writing Intensive)	3		General Elective	3
		General Elective (Sustainability)	3		General Elective (Inclusiveness)	3
					PORT 3000	0
		TOTAL	15		TOTAL	15
ear Four	J	FALL	Hours	J	SPRING	Hours
		CS 4300	3		CS 4910	3
		CS 4500	3		CS Specialty Area Course	3
		CS Specialty Area Course	3		CS Specialty Area Course	3
	1	Upper-Division (UD) General Elective	2-3	1	UD General Elective	3

TOTAL

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