## **COMPUTER SCIENCE B.A.**



### **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: <a href="www.uccs.edu/advising/current-students">www.uccs.edu/advising/current-students</a>
Prospective Students: <a href="www.uccs.edu/admissions/contact">www.uccs.edu/admissions/contact</a>

## **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	outer Science Requirements				
	Computer Science Core Courses	Course/Area	Course Title	Credit Hours			
	(36 hours)	Computer Science Foundation Courses					
		CS 1120*	3				
•	Requires a minimum of 36 credit	CS 1150	Principles of Computer Science	3			
	hours of core CS course work, with an additional 18 hours in a required Track.	CS 1450	Data Structures & Algorithms	3			
		CS 2060	Programming with C	3			
		CS 2080	Programming with UNIX	3			
•	Requires a minimum of 21 credit	CS 2160	Computer Organization & Assembly Language Programming	3			
	hours of upper-division (3000-4999 level) CS course work.	CS 3020, CS 3060, or	Advanced Object Technology Using C#/.NET Object Oriented Programming in C++	3			
•	All CS courses must be completed	CS 3080	Python Programming				
	with a grade of "C" or better.	CS 3160	Concepts of Programming Languages	3			
		CS 3300	Introduction to Software Engineering	3			
	OTE: Students choosing the Game	CS 4300	Advanced Software Engineering (Capstone course)				
inst You	relopment track should take GDD 1100 lead of CS 1120.  It must be admitted into the College of lineering to take CS 1450 or any 2000-	Computer Science Core Electives	Complete 2 courses from the list below. CS 4200, 4500, 4720	6			
leve	el or higher CS coursework.						
•	Computer Science Track (18 hours)  Students are required to complete	Artificial Intelligence & Machine Learning	Complete 6 courses from the list below. CS 3820, 3840, 3850, 4435, 4440, 4435, 4460, 4710, 4730, 4820, 4860, 4870, 4890	18			
	one of the tracks listed.	Cybersecurity	Complete 6 courses from the list below. CS 2910, 3910, 3920, 4220, 4910, 4915, 4920, 4930, 4940, 4950, 4980, 4985	18			
•	Some tracks require additional advanced mathematics courses. Students should carefully check	Game Development	Complete all of the courses listed below: CS 3350, GDD 2150, 3100, 3200, 4100, 4500	18			
	prerequisites when deciding on a track.	General	Complete 18 credit hours of UNUSED upper-division (3000+ level) CS courses in consultation with your faculty advisor. At least 12 hours must be be 4000-level or higher.  NOTE: Internships, Independent Studies, and similar courses cannot be taken for this requirement.	18			

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(	General Education and Elective F	Requirements			
Core Writing Requirement (6 hours)  Mathematics	<ul> <li>ENGL 1310 ENGL 1310, 1308, or 1305 (Students choosing ENGL 1305 must complete ENGL 1300 first.)</li> <li>TCID 2090</li> <li>PORT 3000 (0 Credits) – Writing Portfolio</li> <li>MATH 1040 or MATH 1350</li> </ul>				
(13 hours)	<ul> <li>CS 2020 or MATH 3810</li> <li>CS 2150 or MATH 2150</li> <li>CS 2300 or MATH 3130</li> </ul>				
Compass Curriculum	Component	Course			
(12 hours)	Gateway	GPS 1010			
Explore and Navigate courses must be	Explore – Arts, Humanities and Cultures	See Degree Audit			
outside major requirements	Explore – Society, Behavior and Health	See Degree Audit			
Writing Intensive, Inclusiveness, and	Explore – Physical and Natural World	See Degree Audit			
Sustainability courses can count towards other requirements within degree	Navigate	See Degree Audit			
	Summit	CS 4300 (included in major requirements)			
	Writing Intensive Courses (WIC) Two courses with one upper-division (3000+ level)	See Degree Audit			
	Inclusiveness	See Degree Audit			
	Sustainability	See Degree Audit			
General Electives	Complete 35 hours of open electives to fulfill the total	and upper-division hours required for the degree program.			
(35 hours)					

## **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.

o)	1	FALL	Hours	1	SPRING	Hours
		CS 1120	3		CS 1150	3
) ŭ		ENGL 1310	3		TCID 2090	3
		GPS 1010	3		Explore – Arts, Humanities & Cultures course	3
Yea		MATH 1040 or MATH 1350	4		Explore – Physical and Natural World course	3
		Explore – Society, Behavior & Health course	3		General Elective	4
		TOTAL	16		TOTAL	16

	1	FALL	Hours	1	SPRING	Hours
		CS 1450	3		CS 2060	3
≥		CS 2020 <b>or</b> MATH 3810	3		CS 2150 <b>or</b> MATH 2150	3
		General Elective	3		CS 2300 <b>or</b> MATH 3130	3
Yea		General Elective	3		Track Course	3
		General Elective	4		General Elective (Writing Intensive)	3
		TOTAL	16		TOTAL	15

ee	1	FALL	Hours	1	SPRING	Hours
		CS 2080	3		CS 3160	3
		CS 3020, CS 3060 or CS 3080	3		CS 3300	3
ᆫ		CS 2160	3		Upper-Division (UD) Track Course	3
<u>_</u>		Track Course	3		UD CS Core Elective	3
Yea		General Elective	3		UD General Elective (Inclusiveness)	3
					PORT 3000	0
		TOTAL	15		TOTAL	15

_	1	FALL	Hours	1	SPRING	Hours
		UD CS Core Elective	3		CS 4300	3
0		UD Track Course	3		UD Track Course	3
Year F		UD Track Course	3		UD General Elective (Sustainability)	3
		UD General Elective	3		UD General Elective (UD Writing Intensive)	3
		UD General Elective (Navigate)	3			
		TOTAL	15		TOTAL	12