## **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*	Computational Thinking with Beginning Programming	3					
Requires a minimum of 36 credit	CS 1150	Principles of Computer Science	3					
hours of core CS course work, with	CS 1450	Data Structures & Algorithms	3					
an additional 18 hours in a required Track.	CS 2060	Programming with C	3					
Hack.	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	CS 3020,	Advanced Object Technology Using C#/.NET	3					
level) CS course work.	CS 3060,	Object Oriented Programming in C++						
	or							
All CS courses must be completed	CS 3080	Python Programming						
with a grade of "C" or better.	CS 3160	Concepts of Programming Languages	3					
*NOTE: Students choosing the Game	CS 3300	Introduction to Software Engineering	3					
Development track should take GDD 1100	CS 4300	Advanced Software Engineering (Capstone course)	3					
instead of CS 1120.	Computer	Complete 2 courses from the list below.	6					
	Science Core	CS 4200, 4500, 4720						
You must be admitted into the College of	Electives							
Engineering to take CS 1450 or any 2000-								
level or higher CS coursework.								
Computer Science Track	Artificial	Complete 6 courses from the list below.	18					
(18 hours)	Intelligence & Machine	CS 3820, 3840, 3850, 4435, 4440, 4435, 4460, 4710, 4730, 4820, 4860, 4870, 4890						
Students are required to complete	Learning	4690						
one of the tracks listed.	Cybersecurity	Complete 6 courses from the list below.	18					
	,	CS 2910, 3910, 3920, 4220, 4910, 4915, 4920, 4930, 4940, 4950, 4980, 4985						
Some tracks require additional	Game	Complete all of the courses listed below:	18					
advanced mathematics courses.	Development	CS 3350, GDD 2150, 3100, 3200, 4100, 4500						
Students should carefully check								
prerequisites when deciding on a	General	Complete 18 hours of UNUSED CS upper-division (3000+ level) courses in	18					
track.		consultation with your faculty advisor. At least 4 of the courses must be 4000+						
		level.  NOTE: Internships, Independent Studies, and similar courses cannot be taken for						
		this requirement.						
	L	and requirement	1					

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(	General Education and Elective F	Requirements			
Core Writing Requirement (6 hours)	<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> </ul>				
Mathematics (13 hours)	<ul> <li>MATH 1040 or MATH 1350</li> <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			
<ul> <li>Writing Intensive, Inclusiveness, and</li> </ul>	Explore – Physical and Natural World	See Degree Audit			
Sustainability courses can count	Navigate	See Degree Audit			
•	Summit	CS 4300 (included in major requirements)			
towards other requirements within degree	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 (35 hours)	Complete 35 hours of open electives to fulfill the total	and upper-division hours required for the degree program.			

## **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.							
√ FALL h		Hours	1	SPRING	Hours		
	CS 1120	3		CS 1150	3		
	ENGL 1310	3		TCID 2090	3		

Year One	CS 1120	3	CS 1150	3
	ENGL 1310	3	TCID 2090	3
	GPS 1010	3	Explore – Arts, Humanities & Cultures course	3
	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
,š		CS 2020 <b>or</b> MATH 3810	3		CS 2150 <b>or</b> MATH 2150	3
		General Elective	3		CS 2300 or MATH 3130	3
ea		General Elective	3		Track Course	3
_		General Elective	4		General Elective (Writing Intensive)	3
		TOTAL	16		TOTAL	15

	J	FALL	Hours	J	SPRING	Hours
		CS 2080	3		CS 3160	3
l e		CS 3020, CS 3060 or CS 3080	3		CS 3300	3
ᆫ		CS 2160	3		Upper-Division (UD) Track Course	3
, E		Track Course	3		UD CS Core Elective	3
Yea		General Elective	3		UD General Elective (Inclusiveness)	3
					PORT 3000	0
		TOTAL	15		TOTAL	15

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