# **COMPUTER SCIENCE B.A.**



## **ACADEMIC ADVISING**

Partnering with students to successfully navigate college

**Location:** Main Hall 208 **Phone:** 719.255.3260 **Website:** Academic Advising

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• 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)

	Compu	iter Science Requirements	
Computer Science Core Courses	Course/Area	Course Title	Credit Hours
(36 hours)	CS 1120*	Computational Thinking with Beginning Programming	3
	CS 1150	Principles of Computer Science	3
Requires a minimum of 36 credit hours	CS 1450	Data Structures & Algorithms	3
of core CS course work, with an	CS 2060	Programming with C	3
additional 18 hours in a required Track.	CS 2080	Programming with UNIX	3
Requires a minimum of 21 credit hours	CS 2160	Computer Organization & Assembly Language Programming	3
of upper-division (3000-4999 level) CS	CS 3020,	Advanced Object Technology Using C#/.NET	3
course work.	CS 3060,	Object Oriented Programming in C++	
	or		
All CS Core and Mathematics courses	CS 3080	Python Programming	
must be completed with a grade of "C"	CS 3160	Concepts of Programming Languages	3
or better.	CS 3300	Introduction to Software Engineering	3
*NOTE: Chudoute shoosing the Cours	CS 4300	Advanced Software Engineering (Capstone course)	3
*NOTE: Students choosing the Game Development track should take GDD 1100 instead of CS 1120.	Computer Science Core Electives	Complete 2 courses from the list below. CS 4200, 4500, 4720	6
You must be admitted into the College of 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)  • Students are required to complete one	Intelligence & Machine Learning	CS 3820, 3840, 3850, 4410, 4435, 4440, 4460, 4710, 4730, 4820, 4860, 4870, 4890	
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
<ul> <li>Some tracks require additional advanced mathematics courses.</li> <li>Students should carefully check</li> </ul>	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 <b>UNUSED</b> upper-division (3000+ level) CS courses in consultation with your faculty advisor. At least 12 hours must be be 4000-level or higher. <b>NOTE:</b> Internships, Independent Studies, and similar courses cannot be taken for this requirement.	18

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G	eneral 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>Writing Portfolio – PORT 3000 (0 credits) or PORT 4000 (1 credit) or alternative – See Degree Audit</li> </ul>					
Mathematics (13 hours)  Courses must be completed with a grade of "C" or better.	<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				
<ul> <li>Explore and Navigate courses must be</li> </ul>	Explore – Arts, Humanities and Cultures	See Degree Audit				
taken in departments other than the major.	Explore – Society, Behavior and Health	See Degree Audit				
	Explore – Physical and Natural World	See Degree Audit				
<ul> <li>Writing Intensive, Inclusiveness, and</li> </ul>	Navigate	See Degree Audit				
	Summit	CS 4300 (included in major requirements)				
Sustainability courses may count toward other requirements within the	Writing Intensive Courses (WIC) Two courses with one upper-division (3000+ level)	See Degree Audit				
degree.	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.

	1	FALL	Hours	1	SPRING	Hours
a)		CS 1120	3		CS 1150	3
Ö		ENGL 1310	3		TCID 2090	3
_		GPS 1010	3		Explore – Arts, Humanities & Cultures course	3
ea		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

	J	FALL	Hours	1	SPRING	Hours
0		CS 1450	3		CS 2060	3
,š		CS 2020 <b>or</b> MATH 3810	3		CS 2150 <b>or</b> MATH 2150	3
Ŀ		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	1	SPRING	Hours
4.		CS 2080	3		CS 3160	3
ee		CS 3020, CS 3060 or CS 3080	3		CS 3300	3
ਵੁ		CS 2160	3		Upper-Division (UD) Track Course	3
a.		Track Course	3		UD CS Core Elective	3
(eş		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
no		UD Track Course	3		UD Track Course	3
r T		UD Track Course	3		UD General Elective (Sustainability)	3
ea		UD General Elective	3		UD General Elective (UD Writing Intensive)	3
>		UD General Elective (Navigate)	3			
		TOTAL	15		TOTAL	12