

COLLEGE OF SCIENCE



Computer Science, BS 2024-2025 Catalog | catalog.uah.edu

Completed	Course Number	Credits	Course Name	Semester Usually Offered
			Charger Foundations	
	FU 4040400	2	Area I: Freshman Composition 6 credits - see back for more options	EA/CD/CLI
	EH 101&102	3	College Writing I&II	FA/SP/SU
	EH 103	3	Accelerated College Writing	SP FA
	EH 105	3	Honors English Seminar Area II: Humanities and Fine Arts 12 credits	FA
		3	Fine Art	FA/SP/SU
		3	Literature	FA/SP/SU
	PHL 102 or 150	3	Non-Literature Humanity – Ethics Requirement can double count here	FA/SP/SU
	FHL 102 01 130	3	Humanities/Fine Arts/Literature	FA/SP/SU
Ш		3	Area III: Mathematics and Sciences 11-12 credits	FA/3F/3U
			Mathematics 4 credits	
_	MA 171, 171S, or		Calculus I	5 4 (OD (OL)
	MA 150&151	4	Calculus I with Foundations A & B	FA/SP/SU
			Natural Sciences (Lab) 8 credits	
	AES 103/103L	4	Environmental Earth Science + Lab	FA/SP/SU
Ц	& AES 104/104L	4	Weather & Climate Change + Lab	FA/SP/SU
	BYS 119/121	3/1	Principles of Biology + Lab	FA/SP/SU
	& BYS 120/122	3/1	Organismal Biology + Lab	1 7/31/30
	CH 121/125	3/1	General Chemistry I + Lab	FA/SP/SU
	& CH 123/126	3/1	General Chemistry II + Lab	17,031730
	PH 111/114	3/1	General Physics w/ Calculus I + Lab	FA/SP/SU
	& PH 112/115	3/1	General Physics w/ Calculus II + Lab	
			Area IV: History and Social & Behavioral Sciences 12 credits	
		3	History	FA/SP/SU
		3	Social & Behavioral Science	FA/SP/SU
		3	Social & Behavioral Science	FA/SP/SU
		3	History/Social & Behavioral Science	FA/SP/SU
			Area V: Pre-Professional	
			For Computer Science Majors 24 credits	
	FYE 101S	1	Charger Success - Science	FA
	CS 104	3	Intro to CS Using Python	FA/SP/SU
	PHL 102 or 150	3	Ethics Requirement	FA/SP
	EH 301	3	Technical Writing	FA/SP/SU
	MA 172	4	Calculus II	FA/SP/SU
	MA 201	4	Calculus III	FA/SP/SU
	MA 244	3	Intro to Linear Algebra	FA/SP/SU
	MA 385	3	Intro to Probability & Statistics	FA/SP/SU
			Major Requirements	
			Computer Science Core 30 credits	
	CS 121	3	Computer Science I	FA/SP/SU
	CS 214	3	Intro to Discrete Structures	FA/SP/SU
	CS 221	3	Computer Science II: Date Structures	FA/SP/SU
	CS 309/309L	3	Computer Org & Switching Theory + Lab	FA/SP
	CS 317	3	Intro Design/Analysis of Algorithms	FA/SP/SU
	CS 321	3	Intro Object-Oriented Prog Java	FA/SP
	CS 413/413L	3	Intro to Digital Comp Architecture + Lab	FA/SP
	CS 424	3	Principles Programming Language	FA/SP/SU
	CS 490	3	Intro to Operating Systems	FA/SP
	CS 499	3	Sr Project: Team Software Design	FA/SP
	C3 4//	3	Computer Science Elective Requirements 15 credits	1 70 31
	Choose thre	e CS course	s at the 300-level or higher not listed in the courses above to reach a minimum of 9 credit	hours
П	Choose tille	3	s at the 500 level of higher not listed in the courses above to reach a minimum of 7 credit	FA/SP
		3		FA/SP
		3		FA/SP FA/SP
ш	Chance to		s at the 400-level or higher not listed in the courses above to reach a minimum of 6 credit I	
	Choose two		s at the 400-level of higher hot listed in the courses above to reach a minimum of 6 credit i	
		3		FA/SP FA/SP
		3		LAV2L

Elective courses can be taken from any department and do not have to be taken in your major or minor.

Total = 120+ credits to graduate

36 of the 120 credits must be taken at 300-level or higher. All prerequisite classes must be completed with a "C-" or higher grade. The Catalog is the final authority for all degree requirements.

 ${\bf *Placement \, Requirements:} \, \underline{\bf https://www.uah.edu/admissions/undergraduate/admitted-students/academic-placement} \, \\$





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		Charger Foundations Choice	es		
I. Freshman Composition	Choose 1	College Writing I & II (EH 101 + 102) or (EH 101 + 101L & 102) Honors English Seminar (EH 105; equivalent to EH 101 & EH 102) Accelerated College Writing (EH 103: equivalent to EH 101 & EH 102)			
II. Fine Arts	Choose 1	Ancient to Medieval Art (ARH 100) Renaissance to Modern Art (ARH 101) World Art (ARH 103) Introduction to Drawing (ARS 160) Intro to Film Studies (FMA 123) Intro to Music Literature (MU 100) Theatre Appreciation (TH 122)			
II. Humanities (Literature)	Choose 1	Readings Literature/Culture I (EH 207) Readings Literature/Culture II (EH 208) Honors Literature/Culture I (EH 209) Honors Literature/Culture II (EH 210) Literature Without Borders (EH 241)	Mythology (EH 242) Protest Literature (EH 243) Heroes &/or Monsters (EH 244) Love &/or Romance (EH 245) Speculative Realities (EH 246)		
II. Humanities (Non-Literature)	Choose 1	Intro to Ethics (PHL 102) Science, Tech & Human Values (PHL 150)			
III. Mathematics	\longrightarrow	Calculus I : MA 171 or MA 171S or MA 150 & 151			
III. Natural Sciences (Lab) Sequence	Choose one 2-course sequence	Environmental Earth Science (AES 103/103L) + Weather & Climate Change (AES 104/104L) Principles of Biology (BYS 119/121) + Organismal Biology (BYS 120/122) General Chemistry I (CH 121/125) + General Chemistry II (CH 123/126) General Physics w/ Calculus I (PH 111/114) + General Physics w/ Calculus II (PH 112/115)			
IV. History	Choose 1	World History I (HY 103) World History II (HY 104)	United States to 1877 (HY 221) United States Since 1877 (HY 222)		
IV. Social & Behavioral Sciences	Choose 2	World Geography (AES 105) Human Geography (AES 110) Global systems & Cultures (GS 200) Macroeconomics (ECN 142) Microeconomics (ECN 143) American Gov't (PSC 101) Politics & Foreign Govt (PSC 102)	International Relations (PSC 260) General Psychology (PY 101) Life Span Development (PY 201) Intro to Sociology (SOC 100) Analysis of Social Problems (SOC 102) Intro to Criminology (SOC 103)		
Students must also		Students must take one literature and one			
Area II Sequence	Students must also take <u>either</u> a second literature <u>or</u> history/social & behavioral science course to complete a s Area II Sequence Take a 2 nd Literature <u>AND</u> History or Social & Behavioral Science				
OR					
Area IV Sequence	ea IV Sequence Take a 2 nd History <u>AND</u> Fine Arts or Non-Literature Humanities or Literature Humanities				
Area V. Choices					
Computer Programming	Choose 1	Intro to C Programming (CS 102) Intro to Computer Science Using Python (C	CS 104)		