

COLLEGE OF SCIENCE



Computer Science, BS Web Programming Concentration 2022-2023 Catalog | catalog.uah.edu

ompleted	Course Number	Credits	Course Name	Prerequisites, Corequisites and/or Prerequisites with Concurrency*	Semester Usuall Offered
			Charger Foundati		
			Area I: Freshman Composition 3-6 credits -		
	EH 101	3	College Writing I	<u>Placement</u> *	FA/SP/SU
	EH 102	3	College Writing II	EH 101 or EH 101S	FA/SP/SU
	EH 103	3	Accelerated College Writing	<u>Placement</u> *	SP
	EH 105	3	Honors English Seminar	Honors	FA
			Area II: Humanities and Fine	Arts 12 credits	
		3	Fine Art	See attached for choices	
		3	Literature	Completion of Area I	
	*	3	Non-Literature Humanity - Ethics requirement	See attached for choices	
	*	3	Humanities/Fine Arts/Literature	See attached for choices	
			Area III: Mathematics and Scien		
			Mathematics 4 cre		
	MA 171	4	Calculus A	Placement* or MA 113 or MA 115	FA/SP/SU
	A F.C. 4.0.2 (4.0.2)		Natural Sciences (Lab)	8 credits	
	AES 103/103L & AES 104/104L	4	Environmental Earth Science + Lab Weather & Climate Change + Lab		FA/SP/SU
	BYS 119/121 & BYS 120/122	3/1 3/1	Principles of Biology + Lab Organismal Biology + Lab		FA/SP/SU
	CH 121/125 CH 123/126	3/1 3/1	General Chemistry I + Lab General Chemistry II + Lab	Placement* or CH 101, prereq w/ conc: MA 113+ CH 121	FA/SP/SU
	PH 111/114 PH 112/115	3/1 3/1	General Physics w/ Calculus I + Lab General Physics w/ Calculus II + Lab	MA 171 MA 172, PH 111/114	FA/SP/SU
			Area IV: History and Social & Behavio	oral Sciences 12 credits	
		3	History	See attached for choices	
		3	Social & Behavioral Science	See attached for choices	
		3	Social & Behavioral Science	See attached for choices	
	*	3	History/Social & Behavioral Science	See attached for choices	
		J	Area V: Pre-Profess		
			For Computer Science Majo		
	FYE 101S	1	Charger Success - Science	REQUIRED	FA
	1121013	3	Intro to Computer Programming	See attached for choices	17
	EH 301	3	Technical Writing	Junior standing (60+ hours), EH 102/103/105	FA/SP/SU
	MA 172	4	Calculus B	MA 171	FA/SP/SU
	MA 201	4	Calculus C	MA 171	FA/SP/SU
	MA 244	3	Intro to Linear Algebra	MA 172 MA 120 or MA 172	FA/SP/SU
	MA 385	3	Intro to Probability & Statistics	MA 201	FA/SP/SU
			Major Requireme		
			Computer Science Core		
	CS 121	3	Computer Science I	CS 102/103/104, prereq w/ conc: MA 113+	FA/SP SU
	CS 214	3	Intro to Discrete Structures	MA 171, (CS 121 or CPE 211)	FA/SP SU
	CS 221	3	Computer Science II: Date Structures	CS 121, MA 113 or 115, prereq w/ conc: MA 171	FA/SP SU
	CS 309/309L	3	Computer Org & Switching Theory + Lab	CS 214	FA/SP SU
	CS 317	3	Intro Design/Analysis of Alg	MA 171, 244, CS 214, (CS 221 or CPE 212)	FA/SP SU
	CS 321	3	Intro Object-Oriented Prog Java	CS 221	FA/SP SU
	CS 413/413	3	Intro to Digital Comp Architecture + Lab	CS 309	FA/SP
	CS 424	3	Principles Programming Language	CS 317	FA/SP/SU
	CS 490	3	Intro to Operating Systems	CS 413	FA/SP
	CS 499	3	Sr Project: Team Software Design	CS 317	FA/SP
			Web Programming Concentration Re	equirements 12 credits	
	ARS 230	3	Graphic Design: Introduction	ARS 123, 160	
	ARS 332	3	Graphic Design: Web Design	ARS 230	
	CS 453	3	Client/Server Architectures	CS 307 or 321	
	CS 370		Intro to Computer Networks	CS 309	
	or CS 485	3	or Computer & Software Security	CS 490	
	or CS 487	'	or Database Systems	Senior standing	
			Web Programming Concentration Electiv	-	
			Choose any three 300-level of h	igner Co courses	
			General Elective	1	
			General Electiv		
		Floating -		not have to be taken in your major or minor	
		Elective c	ourses can be taken from any department and do Total = 120+ credits to		



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		Charger Foundations Choice	tes			
		College Writing I & II (EH 101 + 102)				
I. Freshman Composition	Choose 1	Intensive Writing & Studio & Freshman Comp II (EH 101S + 101L & EH 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	\rightarrow	Calculus A (MA 171)				
III. Natural Sciences (Lab) Sequence	Choose one 2-course sequence	Environmental Earth Science (AES 103/103L) and Weather & Climate Change (AES 104/104L) Principles of Biology (BYS 119/121) and Organismal Biology (BYS 120/122) General Chemistry I (CH 121/125) and General Chemistry II (CH 123/126) General Physics w/ Calculus I (PH 111/114) and 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	Students must take one literature and on s must also take <u>either</u> a second literature <u>or</u> histor				
Area II Sequence	Take a 2 nd Lite	rature AND History or Social & Behavioral Science				
<u>OR</u>						
Area IV Sequence						
		Area V. Choices				
Intro to Computer Programming	Choose 1	Intro to C Programming (CS 102) Intro to Programming Using Java (CS 103) Intro to Computer Science Using Python (CS 104)				
		Major Choices				
Dramatic Media Elements	Choose 1	Animation: Introduction (ARS 220) Graphic Design: Introduction (ARS 230) Photography: Introduction (ARS 250) Animation: Organic Modeling (ARS 321) Animation: 3D Animation (ARS 322) Animation: Technical Arts (ARS 324) Animation: Visual Story Development (ARS 327) Animation: Concept Art (ARS 328) Graphic Design: Web User Experience I (ARS 334) Photo: Digital I (ARS 350) Photo: Documentary (ARS 355) Multimedia I (ARS 393) Music Technology IV (MU 306) Special Topics in Comm Arts (CM 340) Fiction Writing (EH 410) Elements of Theatre Production (TH 225)				