

Sem	Grade	Course #	Credits	Course	Prerequisites	Semester offered
Charger Foundation (CF) Requirements 42 credits						
Area I College Writing 3-6 credits (see back for more options)						
		EH 101	3	College Writing I	Placement	FA/SP/SU
		EH 102	3	College Writing II	EH 101 or EH 101S, grade of C- or higher	FA/SP/SU
☑ *Seq in HY or LIT required						
Area II Fine Art and Humanities 12 credits						
		ARS 160	3	Fine Art (Intro to Drawing)		FA/SP/SU
			3	Literature	Completion of Area I	FA/SP/SU
		CM 113	3	Public Speaking	REQUIRED (use as non-literature hum.)	FA/SP/SU
		*	3	Humanities/Fine Arts/Lit	See Back for Choices	FA/SP/SU
Area III Math and Natural Science 12 credits						
		MA 171	4	Calculus A	MA 113, MA 115 or Level 3 placement	FA/SP/SU
Choose one (two course) sequence:						
Lab Science (8 credits)						
		BYS 119	4	Principles of Biology + lab		FA/SP/SU
		BYS 120	4	Organismal Biology + lab	BYS 119 D-	FA/SP/SU
		PH 111/114	3/1	Physics w/ Calculus I + lab	MA 171 C-	FA/SP/SU
		PH 112/115	3/1	Physics w/ Calculus II + lab	PH 111/114 C-, MA 172 C-	FA/SP/SU
		CH 121/125	3/1	Gen Chemistry I + lab	MA 112 C- or MA 113, 115, 120, 171 w/ conc.	FA/SP/SU
		CH 123/126	3/1	Gen Chemistry II + lab	CH 121/125 C-	FA/SP/SU
☑ *Seq in HY or LIT required						
Area IV History and Social Behavioral Science 12 credits						
			3	History	See Back for Choices	FA/SP/SU
			3	Social & Behavioral Science		FA/SP/SU
			3	Social & Behavioral Science		FA/SP/SU
		*	3	History/Soc & Beh Science		FA/SP/SU
Area V College of Science (COS) Requirements in addition to those above 24 credits						
			3	Intro Computer Science	See Back for Choices	FA/SP/SU
		EH 301	3	Technical Writing	EH 101, EH 102, & JR Standing (61+ hrs)	FA/SP/SU
			4	Additional (3 rd) Lab science course	See Back for Choices	FA/SP/SU
		MA 172	4	Calculus B	MA 171 C-	FA/SP/SU
		MA 201	4	Calculus C	MA 172 C-	FA/SP/SU
		MA 244	3	Intro to Linear Algebra	MA 172 C-	FA/SP/SU
		MA 385	3	Intro to Probability & Statistics	MA 201	FA/SP/SU
<i>Note: to add a math minor, take one additional MA 3XX or 4XX course. This course will also fulfill the Technical Elective in the CS major.</i>						
Computer Science (CS) Major Requirements 52 credits						
Computer Science Core						
		CS 105	1	Computer Science Ethics		FA/SP
		CS 121	3	Computer Science I	(CS 102, 103, or 104) + MA 113 w/ Conc.	FA/SP/SU
		CS 214	3	Introduction to Discrete Struct	CS 121, MA 171	FA/SP/SU
		CS 221	3	Computer Sci II: Data Struct	CS 121, MA 113, Prereq w/ Con: MA 171	FA/SP/SU
		CS 309/ 309L	3	Computer Org & Switching Theory	CS 121, CS 214	FA/SP
		CS 317	3	Intro to Design & Anal of Alg	MA 244, CS 214, CS 221	FA/SP/SU
		CS 321	3	Intro Object-Oriented Prog Java	CS 221	FA/SP
		CS 413/413L	3	Intro Digital Computer Architecture	CS 309/309L	FA/SP
		CS 424	3	Programming Languages	CS 317	FA/SP
		CS 490	3	Intro to Operating Systems	CS 413/413L	FA/SP
		CS 499	3	SR Proj: Team Software Design	CS 317	FA/SP
Web Programming Concentration						
		ARS 230	3	Graphic Design: Introduction	ARS 160 - see Area II (ARS 123 prerequisite waived by ARS department.)	FA/SP
		ARS 332	3	Graphic Design: Web Design	ARS 230	FA/SP
		CS 453	3	Client/Server Architecture	CS 307 or 321. CS 370 recommended	FA
Choose at least one of: CS 370 Comp. Networking, CS 485 Comp Security, or CS 487 Database Systems to count as an elective below:						
			3	CS 3XX or 4XX course		
			3	CS 3XX or 4XX course		FA/SP
			3	CS 3XX or 4XX course		FA/SP
			3	CS 4XX course		FA/SP
See next page for more requirements.						

Elective Courses

13 elective credits if no minor. 10 elective credits if MA minor. Elective courses can be taken in any department and do not have to be in your major or minor. No more than 4 HPE activity (HPE 100-199) credits count for elective courses.

Total (CF + COS + CS + electives) = 128 credits to graduate. 39 of the 128 credits must be taken @ 300 level or higher.

Unless otherwise noted a C- or better is required for all College of Science prerequisites.

Computer Science (CS) Major
Charger (CF) Foundations and College of Science (COS) Requirements
 catalog.uah.edu

CF Requirements		Choices to fulfill the requirements
College Writing I & II (Requires C- or better)	Choose 1 option →	<ul style="list-style-type: none"> College Writing I & II (EH 101 + 102) Intensive Writing & Studio & Freshman Comp II (EH 101S + 101L & EH 102) Honors English Seminar (EH 105; equivalent to EH 101 & EH 102) Fall only Accelerated College Writing (EH 103; equivalent to EH 101 & EH 102) Spring only
Fine Arts	Choose 1 →	Introduction to Drawing (ARS 160)
Humanities Non-Literature	Required →	Public Speaking (CM 113) Required course for Science Majors – use as the non-literature Humanities
Literature	Choose 1 →	<ul style="list-style-type: none"> Readings Literature/Culture I (EH 207) Readings Literature/Culture II (EH 208) Mythology (EH 242) Honors Literature I (EH 209) Honors Literature II (EH 210)
Humanities/ Fine Art/ 2nd Literature	Choose 1 →	<ul style="list-style-type: none"> Ancient & Medieval Worlds (AMS 229) Intro to Philosophy (PHL 101) Intro to Ethics (PHL 102) Science, Tech & Human Values (PHL 150) Intro to Logic (PHL 201) Intro to Film Studies (FMA 123) Foreign Language (WLC 101) International Cinema (WLC 204) Intro to Women's Studies (WS 200) See above for Lit & Fine Art Courses
Math	→	Calculus A (MA 171)
Natural Lab Science Sequence	Choose 1 →	<ul style="list-style-type: none"> Biology I & II (BYS 119/119L/119R + BYS 120/120L/120R) Physics w/ Calculus I & II (PH 111/114 + PH 112/115) General Chemistry I & II (CH 121/125 + CH 123/126)
History	Choose 1 →	<ul style="list-style-type: none"> World History I (HY 103) US History I (HY 221) World History II (HY 104) US History II (HY 222)
Social & Behavioral Sciences	Choose 2 →	<ul style="list-style-type: none"> Macroeconomics (ECN 142) Microeconomics (ECN 143) American Govt (PSC 101) Politics & Foreign Govt (PSC 102) International Relations (PSC 260) World Geography (ESS 105) Human Geography (ESS 110) Global systems & cultures (GS 200) Intro to Sociology (SOC 100) Analysis of Social Problems (SOC 102) Intro to Criminology (SOC 103) Intro to Anthropology (SOC 105) Sociological Perspective on Tech and Science (SOC 150) General Psychology I (PY 101) Life Span Development (PY 201)
History OR Social Behavioral Science	Choose 1 →	Take either 2 nd History Course OR 3 rd Social & Behavioral Science (no more than 6 hrs in a discipline)
History or Literature Sequence	Check for one	History: (HY 103 + HY 104) or (HY 221 + HY 222) OR Literature: Any Part I (EH 207, 242, or Honors EH 209) + Any Part II (EH 208 or honors EH 210)
COS Requirements		Choices to fulfill the requirements
Additional Science or Engineering	Choose 1 →	<ul style="list-style-type: none"> Biology (BYS 119) see above Chemistry (CH 121/125) Physics (PH 111/114, PH 112/115, or PH 113/116) Astronomy (AST 106 or 107) Atmospheric & Earth Science (ESS 103 or ESS 111)
Computer Science	→	<ul style="list-style-type: none"> Intro to C Prog. (CS 102) Intro Prog. Using Java (CS 103) Intro to CS Using Python (CS 104)
Technical Writing	→	Technical Writing (EH 301) Junior standing (61 hours) required to take this course
Technical elective	→	ARS 332 Graphic Design: Web Design