

Completed	Course Number	Credits	Course Name	Prerequisites, Corequisites and/or Prerequisites with Concurrency*	Semester Usually Offered
Charger Foundations					
Area I: Freshman Composition 6 credits – see attached for more options					
<input type="checkbox"/>	EH 101	3	College Writing I	Placement*	FA/SP/SU
<input type="checkbox"/>	EH 102	3	College Writing II	EH 101 or EH 101S	FA/SP/SU
<input type="checkbox"/>	EH 103	3	Accelerated College Writing	Placement*	SP
<input type="checkbox"/>	EH 105	3	Honors English Seminar	Honors	FA
Area II: Fine Art and Humanities 12 credits					
<input type="checkbox"/>		3	Fine Art	See attached for choices	
<input type="checkbox"/>		3	Literature	Completion of Area I	
<input type="checkbox"/>	CM 113	3	Public Speaking	REQUIRED (use as Non-Literature Humanity)	FA/SP/SU
<input type="checkbox"/>	*	3	Humanities/Fine Arts/Literature	See attached for choices	
Area III: Math and Natural Science 12 credits					
Math 4 credits					
<input type="checkbox"/>	MA 171	4	Calculus A	MA 113, MA 115 or Level 3 Placement	FA/SP/SU
Lab Science 8 credits					
Choose one (two course) sequence:					
<input type="checkbox"/>	PH 111/114	3/1	Physics w/ Calculus I + Lab	MA 171	FA/SP/SU
<input type="checkbox"/>	PH 112/115	3/1	Physics w/ Calculus II + Lab	PH 111/114, MA 172	FA/SP/SU
<input type="checkbox"/>	BYS 119	4	Principles of Biology + Lab		FA/SP/SU
<input type="checkbox"/>	BYS 120	4	Organismal Biology + Lab		FA/SP/SU
<input type="checkbox"/>	CH 121/125	3/1	Gen Chemistry I + Lab	MA 112 or MA 113, 115, 120, 171 w/ con	FA/SP/SU
<input type="checkbox"/>	CH 123/126	3/1	Gen Chemistry II + Lab	CH 121/125	FA/SP/SU
Area IV: History and Social & Behavioral Science 12 credits					
<input type="checkbox"/>		3	History	See attached for choices	
<input type="checkbox"/>		3	Social & Behavioral Science		
<input type="checkbox"/>		3	Social & Behavioral Science		
<input type="checkbox"/>	*	3	History/Social & Behavioral Science		
Area V: College of Science Requirements 25 credits					
<input type="checkbox"/>	FYE 101S	1	Charger Success – Science	REQUIRED	FA/SP
<input type="checkbox"/>		3	Intro to Computer Science	*See attached for choices	
<input type="checkbox"/>	EH 301	3	Technical Writing	EH 101, EH 102, EH 103, EH 105	FA/SP/SU
<input type="checkbox"/>		3	Additional (3rd) Lab Science Course	*See attached for choices	
<input type="checkbox"/>	MA 172	4	Calculus B	MA 171	FA/SP/SU
<input type="checkbox"/>	MA 201	4	Calculus C	MA 172	FA/SP/SU
<input type="checkbox"/>	MA 244	3	Intro to Linear Algebra	MA 172	FA/SP/SU
<input type="checkbox"/>	MA 385	3	Intro to Probability and Statistics	MA 201	FA/SP/SU
Note: to fulfill a Math minor, take one additional MA 300 or 400 course. This course will also fulfill the Technical Elective in the CS Major.					
Computer Science Major Requirements 49 credits					
<input type="checkbox"/>	CS 105	1	Computer Science Ethics		FA/SP
<input type="checkbox"/>	CS 121	3	Computer Science I	(CS 102, 103, OR 104), MA 113 w/ con	FA/SP/SU
<input type="checkbox"/>	CS 214	3	Introduction to Discrete Structure	CS 121, MA 171	FA/SP/SU
<input type="checkbox"/>	CS 221	3	Computer Science II: Data Structures	CS 121, MA 113, Prereq w/ con MA 171	FA/SP/SU
<input type="checkbox"/>	CS 309/309L	3	Switching Theory	CS 121, Prereq w/ con CS 214	FA/SP
<input type="checkbox"/>	CS 317	3	Intro to Design & Analysis of Alg	MA 244, CS 214, CS 221	FA/SP/SU
<input type="checkbox"/>	CS 321	3	Intro Object-Oriented Prog Java	CS 308, CS 309/309L	FA/SP
<input type="checkbox"/>	CS 413/413L	3	Intro to Digital Computer Design	CS 317	FA/SP
<input type="checkbox"/>	CS 424	3	Programming Languages		FA/SP
<input type="checkbox"/>	CS 490	3	Intro to Operating Systems		FA/SP
<input type="checkbox"/>	CS 499	3	SR Prog: Team Software Design		FA/SP
<input type="checkbox"/>		3			
<input type="checkbox"/>		3	CS 300 or 400 course		
<input type="checkbox"/>		3			
<input type="checkbox"/>		3	CS 400 course		
<input type="checkbox"/>		3			
<input type="checkbox"/>		3	Technical Elective	*See attached for choices	
Elective Courses 13 credits (10 credits with MA minor)					
Elective courses can be taken from any department and do not have to be taken in your major or minor No more than- 4 HPE activity (HPE 100-199) credits count towards the 128 credits.					
<input type="checkbox"/>					
<input type="checkbox"/>					
<input type="checkbox"/>					
Total = 128 credits to graduate					
39 of the 128 credits must be taken @ 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.

*Placement Requirements: <https://www.uah.edu/admissions/undergraduate/admitted-students/academic-placement>

Charger Foundations Requirement Choices

College Writing I & II	<i>Choose 1</i>	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) Accelerated College Writing (EH 103; equivalent to EH 101 & EH 102)
Fine Arts	<i>Choose 1</i>	Ancient to Medieval Art (ARH 100) Renaissance to Modern Art (ARH 101) Non-Western Art (ARH 103) Theatre Appreciation (TH 122) Introduction to Drawing (ARS 160) Intro to Music Literature (MU 100)
Literature	<i>Choose 1</i>	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 Non-Literature	<i>Required</i>	Public Speaking (CM 113) Required course for Science Majors – use as the Non-Literature Humanities
Humanities/ Fine Art/ 2nd Literature	<i>Choose 1</i>	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
Mathematics	→	Calculus A (MA 171 or MA 171S)
Natural Lab Science Sequence	<i>Choose 1</i>	Physics w/ Calculus I & II (PH 111/114 + PH 112/115) Biology I and II (BYS 119/L/R + BYS 120/L/R) Chemistry I and II (CH 121/125 + 123/126)
History	<i>Choose 1</i>	World History I (HY 103) World History II (HY 104)
Social & Behavioral Sciences	<i>Choose 2</i>	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) Sociological Perspective on Tech and Science (SOC 150) General Psychology (PY 101) Life Span Development (PY 201)
History or Social & Behavioral Sciences	<i>Choose 1</i>	Take either 2 nd History Course OR 3 rd Social & Behavioral Science
History or Literature Sequence	<i>Required</i>	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)

College of Science Requirement Choices

Additional Science or Engineering	<i>Choose 1</i>	Biology (BYS 119/L or BYS 120/L) Chemistry (CH 121/125) Physics (PH 111/114, PH 112/115, or PH 113/116) Astronomy (AST 106 or 107) Earth System Science (ESS 103 or 104)
Computer Science	<i>Choose 1</i>	Intro to C Programming (CS 102) Intro to Programming Using JAVA (CS 103) Intro to CS Using Python (CS 104)
Technical Writing	→	Technical Writing (EH 301) Required course for Science Majors
Technical Elective	→	Any 300 or 400 level College of Science course, CPE 412 or 436, PHL 317 or 320, IS422, 460, 463, 471, or 472. The final MA 300 or 400 course in the math minor may also count here

Completed	Course Number	Credits	Course Name	Prerequisites, Corequisites and/or Prerequisites with Concurrency*	Semester Usually Offered
Charger Foundations					
Area I: Freshman Composition 6 credits – see attached for more options					
<input type="checkbox"/>	EH 101	3	College Writing I	Placement*	FA/SP/SU
<input type="checkbox"/>	EH 102	3	College Writing II	EH 101 or EH 101S	FA/SP/SU
<input type="checkbox"/>	EH 103	3	Accelerated College Writing	Placement*	SP
<input type="checkbox"/>	EH 105	3	Honors English Seminar	Honors	FA
Area II: Fine Art and Humanities 12 credits					
<input type="checkbox"/>		3	Fine Art	See attached for choices	
<input type="checkbox"/>		3	Literature	Completion of Area I	
<input type="checkbox"/>	CM 113	3	Public Speaking	REQUIRED (use as Non-Literature Humanity)	FA/SP/SU
<input type="checkbox"/>	*	3	Humanities/Fine Arts/Literature	See attached for choices	
Area III: Natural Science 8 credits					
Physics 8 credits					
<input type="checkbox"/>	PH 111/114	3/1	Physics w/ Calculus I + Lab	MA 171	FA/SP/SU
<input type="checkbox"/>	PH 112/115	3/1	Physics w/ Calculus II + Lab	PH 111/114, MA 172	FA/SP/SU
Area IV: History and Social & Behavioral Science 12 credits					
<input type="checkbox"/>		3	History	See attached for choices	
<input type="checkbox"/>		3	Social & Behavioral Science		
<input type="checkbox"/>		3	Social & Behavioral Science		
<input type="checkbox"/>	*	3	History/Social & Behavioral Science		
Area V: College of Science Requirements 11 credits					
<input type="checkbox"/>	FYE 101S	1	Charger Success – Science	REQUIRED	FA/SP
<input type="checkbox"/>	CS 102	3	Intro to C Programming	REQUIRED	FA/SP/SU
<input type="checkbox"/>	EH 301	3	Technical Writing	EH 101, EH 102	FA/SP/SU
<input type="checkbox"/>		4	*Additional Lab Science Course	See attached for choices	
Computer Science Major Requirements 46 credits					
<input type="checkbox"/>	CS 104	1	Computer Science Ethics		FA/SP
<input type="checkbox"/>	CS 121	3	Computer Science I	(CS 102, 103, OR 104), MA 113 w/Conc	FA/SP/SU
<input type="checkbox"/>	CS 214	3	Introduction to Discrete Structure	CS 121, MA 171	FA/SP/SU
<input type="checkbox"/>	CS 221	3	Computer Science II: Data Structures	CS 121, MA 113, Prereq w/Conc MA 171	FA/SP/SU
<input type="checkbox"/>	CS 309/309L	3	Switching Theory	CS 121, Prereq w/Conc CS 214	FA/SP
<input type="checkbox"/>	CS 317	3	Intro to Design & Analysis of Alg	MA 244, CS 214, CS 221	FA/SP/SU
<input type="checkbox"/>	CS 321	3	Intro Object-Oriented Prog Java	CS 308, CS 309/309L	FA/SP
<input type="checkbox"/>	CS 413/413L	3	Intro to Digital Computer Design	CS 317	FA/SP
<input type="checkbox"/>	CS 424	3	Programming Languages		FA/SP
<input type="checkbox"/>	CS 490	3	Intro to Operating Systems		FA/SP
<input type="checkbox"/>	CS 499	3	SR Prog: Team Software Design		FA/SP
<input type="checkbox"/>		3	CS 300 or 400 Level Course		
<input type="checkbox"/>		3			
<input type="checkbox"/>		3			
<input type="checkbox"/>		3			
<input type="checkbox"/>		3	CS 400		
Math Double Major Requirements 39 credits					
<input type="checkbox"/>	MA 171	4	Calculus A	MA 113, MA 115, or Level 3 Placement	FA/SP/SU
<input type="checkbox"/>	MA 172	4	Calculus B	MA 171 (C-)	FA/SP/SU
<input type="checkbox"/>	MA 201	4	Calculus C	MA 172 (C-)	FA/SP/SU
<input type="checkbox"/>	MA 238	3	Applied Differential Equations	MA 172 (C-), Prereq w/Conc MA 201	FA/SP/SU
<input type="checkbox"/>	MA 244	3	Intro to Linear Algebra	MA 172 (C-)	FA/SP/SU
<input type="checkbox"/>	MA 330	3	Foundation of Math	MA 172, MA 244	FA/SP/SU
<input type="checkbox"/>	MA 385	3	Intro to Probability and Statistics	MA 201 (C-)	FA/SP/SU
Choose 1:					
<input type="checkbox"/>	MA 415	3	Intro to Numerical Methods	MA 201, MA 244, CS 121	FA/SP
<input type="checkbox"/>	MA 452**	3	Intro to Real Analysis	MA 330	FA/SP
<input type="checkbox"/>	MA 453	3	Intro to Complex Analysis	MA 201, MA 300+	FA
<input type="checkbox"/>	MA 460	3	Intro to Fourier Analysis	MA 244, MA 238	FA
Choose 1:					
<input type="checkbox"/>	MA 442**	3	Algebraic Structures w/App	MA 244, MA 330 or MA 385	FA/SP/SU
<input type="checkbox"/>	MA 450	3	Combinatorial Enumeration	MA 385, Prereq w/Conc MA 442	SP
<input type="checkbox"/>	MA 458	3	Applied Linear Algebra	MA 238, MA 244	FA/SP
<input type="checkbox"/>	MA 300+	3	MA 300+ Elective		
<input type="checkbox"/>	MA 300+	3	MA 300+ Elective		
<input type="checkbox"/>	MA 300+	3	MA 300+ Elective		
**If neither MA 442 or MA 452 is taken, an additional MA 300+ course is required.					
Total = 133 credits to graduate					
40 of the 133 credits must be taken @ 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.

*Placement Requirements: <https://www.uah.edu/admissions/undergraduate/admitted-students/academic-placement>

Charger Foundations Requirement Choices

College Writing I & II	<i>Choose 1</i>	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) Accelerated College Writing (EH 103; equivalent to EH 101 & EH 102)
Fine Arts	<i>Choose 1</i>	Ancient to Medieval Art (ARH 100) Renaissance to Modern Art (ARH 101) Non-Western Art (ARH 103) Theatre Appreciation (TH 122) Introduction to Drawing (ARS 160) Intro to Music Literature (MU 100)
Literature	<i>Choose 1</i>	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 Non-Literature	<i>Required</i>	Public Speaking (CM 113) Required course for Science Majors – use as the Non-Literature Humanities
Humanities/ Fine Art/ 2nd Literature	<i>Choose 1</i>	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
Mathematics	→	Calculus A (MA 171 or MA 171S)
Natural Lab Science Sequence	<i>Choose 1</i>	Physics w/ Calculus I & II (PH 111/114 + PH 112/115) Biology I and II (BYS 119/L/R + BYS 120/L/R) Chemistry I and II (CH 121/125 + 123/126)
History	<i>Choose 1</i>	World History I (HY 103) World History II (HY 104)
Social & Behavioral Sciences	<i>Choose 2</i>	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) Sociological Perspective on Tech and Science (SOC 150) General Psychology (PY 101) Life Span Development (PY 201)
History or Social & Behavioral Sciences	<i>Choose 1</i>	Take either 2 nd History Course OR 3 rd Social & Behavioral Science
History or Literature Sequence	<i>Required</i>	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)

College of Science Requirement Choices

Additional Science or Engineering	<i>Choose 1</i>	Biology (BYS 119/L or BYS 120/L) Chemistry (CH 121/125) Physics (PH 111/114, PH 112/115, or PH 113/116) Astronomy (AST 106 or 107) Earth System Science (ESS 103 or 104)
Computer Science	<i>Choose 1</i>	Intro to C Programming (CS 102) Intro to Programming Using JAVA (CS 103) Intro to CS Using Python (CS 104)
Technical Writing	→	Technical Writing (EH 301) Required course for Science Majors
Technical Elective	→	Any 300 or 400 level College of Science course, CPE 412 or 436, PHL 317 or 320, IS422, 460, 463, 471, or 472. The final MA 300 or 400 course in the math minor may also count here

Completed	Course Number	Credits	Course Name	Prerequisites, Corequisites and/or Prerequisites with Concurrency*	Semester Usually Offered
Charger Foundations					
Area I: Freshman Composition 6 credits – see attached for more options					
<input type="checkbox"/>	EH 101	3	College Writing I	Placement*	FA/SP/SU
<input type="checkbox"/>	EH 102	3	College Writing II	EH 101 or EH 101S	FA/SP/SU
<input type="checkbox"/>	EH 103	3	Accelerated College Writing	Placement*	SP
<input type="checkbox"/>	EH 105	3	Honors English Seminar	Honors	FA
Area II: Fine Art and Humanities 12 credits					
<input type="checkbox"/>		3	Fine Art	See attached for choices	
<input type="checkbox"/>		3	Literature	Completion of Area I	
<input type="checkbox"/>	CM 113	3	Public Speaking	REQUIRED (use as Non-Literature Humanity)	FA/SP/SU
<input type="checkbox"/>	*	3	Humanities/Fine Arts/Literature	See attached for choices	
Area III: Math and Natural Science 12 credits					
Math 4 credits					
<input type="checkbox"/>	MA 171	4	Calculus A	MA 113, MA 115 or Level 3 Placement	FA/SP/SU
Lab Science 8 credits					
Choose one (two course) sequence:					
<input type="checkbox"/>	PH 111/114	3/1	Physics w/ Calculus I + Lab	MA 171	FA/SP/SU
<input type="checkbox"/>	PH 112/115	3/1	Physics w/ Calculus II + Lab	PH 111/114, MA 172	FA/SP/SU
<input type="checkbox"/>	BYS 119	4	Principles of Biology + Lab		FA/SP/SU
<input type="checkbox"/>	BYS 120	4	Organismal Biology + Lab		FA/SP/SU
<input type="checkbox"/>	CH 121/125	3/1	Gen Chemistry I + Lab	MA 112 or MA 113, 115, 120, 171 w/Conc	FA/SP/SU
<input type="checkbox"/>	CH 123/126	3/1	Gen Chemistry II + Lab	CH 121/125	FA/SP/SU
Area IV: History and Social & Behavioral Science 12 credits					
<input type="checkbox"/>		3	History	See attached for choices	
<input type="checkbox"/>		3	Social & Behavioral Science		
<input type="checkbox"/>		3	Social & Behavioral Science		
<input type="checkbox"/>	*	3	History/Social & Behavioral Science		
Area V: College of Science Requirements 25 credits					
<input type="checkbox"/>	FYE 101S	1	Charger Success – Science	REQUIRED	FA/SP
<input type="checkbox"/>		3	Intro to Computer Science	*See attached for choices	
<input type="checkbox"/>	EH 301	3	Technical Writing	EH 101, EH 102	FA/SP/SU
<input type="checkbox"/>		3	Additional (3rd) Lab Science Course	*See attached for choices	
<input type="checkbox"/>	MA 172	4	Calculus B	MA 171	FA/SP/SU
<input type="checkbox"/>	MA 201	4	Calculus C	MA 172	FA/SP/SU
<input type="checkbox"/>	MA 244	3	Intro to Linear Algebra	MA 172	FA/SP/SU
<input type="checkbox"/>	MA 385	3	Intro to Probability and Statistics	MA 201	FA/SP/SU
Note: to fulfill a Math minor, take one additional MA 300 or 400 course. This course will also fulfill the Technical Elective in the CS Major.					
Computer Science Major Requirements 52 credits					
Computer Science Core 34 credits					
<input type="checkbox"/>	CS 121	3	Computer Science I	(CS 102, 103, OR 104), MA 113 w/Conc	FA/SP/SU
<input type="checkbox"/>	CS 214	3	Introduction to Discrete Structure	CS 121, MA 171	FA/SP/SU
<input type="checkbox"/>	CS 221	3	Computer Science II: Data Structures	CS 121, MA 113, Prereq w/Conc MA 171	FA/SP/SU
<input type="checkbox"/>	CS 309/309L	3	Switching Theory	CS 121, Prereq w/Conc CS 214	FA/SP
<input type="checkbox"/>	CS 317	3	Intro to Design & Analysis of Alg	MA 244, CS 214, CS 221	FA/SP/SU
<input type="checkbox"/>	CS 321	3	Intro Object-Oriented Prog Java	CS 308, CS 309/309L	FA/SP
<input type="checkbox"/>	CS 413/413L	3	Intro to Digital Computer Design	CS 317	FA/SP
<input type="checkbox"/>	CS 424	3	Programming Languages		FA/SP
<input type="checkbox"/>	CS 490	3	Intro to Operating Systems		FA/SP
<input type="checkbox"/>	CS 499	3	SR Prog: Team Software Design		FA/SP
<input type="checkbox"/>		3	Technical Elective	*See attached for choices	
Web Programming Concentration 21 credits					
<input type="checkbox"/>	ARS 230	3	Graphic Design: Introduction	ARS 120 - See Area II (ARS 123 prereq waived by ARS dept)	FA/SP
<input type="checkbox"/>	ARS 332	3	Graphic Design: Web Design	ARS 230	FA/SP
<input type="checkbox"/>	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					
<input type="checkbox"/>		3	CS 300 or 400 course		
<input type="checkbox"/>		3	CS 300 or 400 course		
<input type="checkbox"/>		3	CS 300 or 400 course		
<input type="checkbox"/>		3	CS 400 course		
Elective Courses 13 credits (10 credits w/ minor)					
Elective courses can be taken from any department and do not have to be taken in your major or minor No more than- 4 HPE activity (HPE 100-199) credits count towards the 128 credits.					
<input type="checkbox"/>					
<input type="checkbox"/>					
<input type="checkbox"/>					
Total = 128 credits to graduate					
39 of the 128 credits must be taken @ 300 level or higher					

Charger Foundations Requirement Choices

College Writing I & II	<i>Choose 1</i>	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) Accelerated College Writing (EH 103; equivalent to EH 101 & EH 102)
Fine Arts	<i>Choose 1</i>	Ancient to Medieval Art (ARH 100) Renaissance to Modern Art (ARH 101) Non-Western Art (ARH 103) Theatre Appreciation (TH 122) Introduction to Drawing (ARS 160) Intro to Music Literature (MU 100)
Literature	<i>Choose 1</i>	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 Non-Literature	<i>Required</i>	Public Speaking (CM 113) Required course for Science Majors – use as the Non-Literature Humanities
Humanities/ Fine Art/ 2nd Literature	<i>Choose 1</i>	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
Mathematics	→	Calculus A (MA 171 or MA 171S)
Natural Lab Science Sequence	<i>Choose 1</i>	Physics w/ Calculus I & II (PH 111/114 + PH 112/115) Biology I and II (BYS 119/L/R + BYS 120/L/R) Chemistry I and II (CH 121/125 + 123/126)
History	<i>Choose 1</i>	World History I (HY 103) World History II (HY 104)
Social & Behavioral Sciences	<i>Choose 2</i>	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) Sociological Perspective on Tech and Science (SOC 150) General Psychology (PY 101) Life Span Development (PY 201)
History or Social & Behavioral Sciences	<i>Choose 1</i>	Take either 2 nd History Course OR 3 rd Social & Behavioral Science
History or Literature Sequence	<i>Required</i>	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)

College of Science Requirement Choices

Additional Science or Engineering	<i>Choose 1</i>	Biology (BYS 119/L or BYS 120/L) Chemistry (CH 121/125) Physics (PH 111/114, PH 112/115, or PH 113/116) Astronomy (AST 106 or 107) Earth System Science (ESS 103 or 104)
Computer Science	<i>Choose 1</i>	Intro to C Programming (CS 102) Intro to Programming Using JAVA (CS 103) Intro to CS Using Python (CS 104)
Technical Writing	→	Technical Writing (EH 301) Required course for Science Majors
Technical Elective	→	Any 300 or 400 level College of Science course, CPE 412 or 436, PHL 317 or 320, IS422, 460, 463, 471, or 472. The final MA 300 or 400 course in the math minor may also count here

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Area I: Freshman Composition 6 credits – see attached for more options					
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<input type="checkbox"/>	EH 102	3	College Writing II	EH 101 or EH 101S	FA/SP/SU
<input type="checkbox"/>	EH 103	3	Accelerated College Writing	Placement*	SP
<input type="checkbox"/>	EH 105	3	Honors English Seminar	Honors	FA
Area II: Fine Art and Humanities 12 credits					
<input type="checkbox"/>		3	Fine Art	See attached for choices	
<input type="checkbox"/>		3	Literature	Completion of Area I	
<input type="checkbox"/>	CM 113	3	Public Speaking	REQUIRED (use as Non-Literature Humanity)	FA/SP/SU
<input type="checkbox"/>	*	3	Humanities/Fine Arts/Literature	See attached for choices	
Area III: Math and Natural Science 8/12 credits					
Math 4 credits					
<input type="checkbox"/>	MA 171	4	Calculus A	MA 113, MA 115 or Level 3 Placement	FA/SP/SU
Lab Science 8 credits					
<input type="checkbox"/>	PH 111/114	3/1	Physics w/ Calculus I + Lab	MA 171	FA/SP/SU
<input type="checkbox"/>	PH 112/115	3/1	Physics w/ Calculus II + Lab	PH 111/114, MA 172	FA/SP/SU
<input type="checkbox"/>	BYS 119	4	Principles of Biology + Lab		FA/SP/SU
<input type="checkbox"/>	BYS 120	4	Organismal Biology + Lab		FA/SP/SU
<input type="checkbox"/>	CH 121/125	3/1	Gen Chemistry I + Lab	MA 112 or MA 113, 115, 120, 171 w/Conc	FA/SP/SU
<input type="checkbox"/>	CH 123/126	3/1	Gen Chemistry II + Lab	CH 121/125	FA/SP/SU
Area IV: History and Social & Behavioral Science 12 credits					
<input type="checkbox"/>		3	History		
<input type="checkbox"/>		3	Social & Behavioral Science		
<input type="checkbox"/>		3	Social & Behavioral Science	See attached for choices	
<input type="checkbox"/>	*	3	History/Social & Behavioral Science		
Area V: College of Science Requirements 25 credits					
<input type="checkbox"/>	FYE 101S	1	Charger Success – Science	REQUIRED	FA/SP
<input type="checkbox"/>		3	Intro to Computer Science	*See attached for choices	
<input type="checkbox"/>	EH 301	3	Technical Writing	EH 101, EH 102	FA/SP/SU
<input type="checkbox"/>		3	Additional (3rd) Lab Science Course	*See attached for choices	
<input type="checkbox"/>	MA 172	4	Calculus B	MA 171	
<input type="checkbox"/>	MA 201	4	Calculus C	MA 172	
<input type="checkbox"/>	MA 244	3	Intro to Linear Algebra	MA 172	
<input type="checkbox"/>	MA 385	3	Intro to Probability and Statistics	MA 201	
<input type="checkbox"/>					
Note: to add a Math minor, take one additional MA 300 or 400 course. This course will also fulfill the Technical Elective in the CS Major.					
Computer Science Major Requirements 49 credits					
CS Core 31 credits					
<input type="checkbox"/>	CS 104	1	Computer Science Ethics		FA/SP
<input type="checkbox"/>	CS 121	3	Computer Science I	(CS 102, 103, or 104), MA 113 w/Conc	FA/SP/SU
<input type="checkbox"/>	CS 214	3	Introduction to Discrete Structure	CS 121, MA 171	FA/SP/SU
<input type="checkbox"/>	CS 221	3	Computer Science II: Data Structures	CS 121, MA 113, Prereq w/Conc MA 171	FA/SP/SU
<input type="checkbox"/>	CS 309/309L	3	Switching Theory	CS 121, Prereq w/Conc CS 214	FA/SP
<input type="checkbox"/>	CS 317	3	Intro to Design & Analysis of Alg	MA 244, CS 214, CS 221	FA/SP/SU
<input type="checkbox"/>	CS 321	3	Intro Object-Oriented Prog Java	CS 308, CS 309/309L	FA/SP
<input type="checkbox"/>	CS 413/413L	3	Intro to Digital Computer Design	CS 317	FA/SP
<input type="checkbox"/>	CS 424	3	Programming Languages		FA/SP
<input type="checkbox"/>	CS 490	3	Intro to Operating Systems		FA/SP
<input type="checkbox"/>	CS 499	3	SR Prog: Team Software Design		FA/SP
Data Science Concentration 18 credits					
<input type="checkbox"/>	CS 430	3	Survey of Artificial Intelligence	CS 317	
<input type="checkbox"/>	CS 488	3	Intro to Big Data Computing	CS 317	FA
<input type="checkbox"/>	Data Science Elective	3	Choose one: CS 443 Intro Multimedia Syst, CS 445 Intro Comp Graph., CS 454 Intro to Cloud Comp,		
<input type="checkbox"/>		3	CS 300+ or 400+ Course		
<input type="checkbox"/>		3	CS 300+ or 400+ Course		
<input type="checkbox"/>		3	Technical Elective	See attached for choices	
Elective Courses 13 credits (10 credits if MA minor)					
Elective courses can be taken from any department and do not have to be taken in your major or minor					
<input type="checkbox"/>					
<input type="checkbox"/>					
<input type="checkbox"/>					
Total = 128 credits to graduate					
39 of the 128 credits must be taken @ 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.

*Placement Requirements: <https://www.uah.edu/admissions/undergraduate/admitted-students/academic-placement>

Charger Foundations Requirement Choices

College Writing I & II	<i>Choose 1</i>	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) Accelerated College Writing (EH 103; equivalent to EH 101 & EH 102)
Fine Arts	<i>Choose 1</i>	Ancient to Medieval Art (ARH 100) Renaissance to Modern Art (ARH 101) Non-Western Art (ARH 103) Theatre Appreciation (TH 122) Introduction to Drawing (ARS 160) Intro to Music Literature (MU 100)
Literature	<i>Choose 1</i>	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 Non-Literature	<i>Required</i>	Public Speaking (CM 113) Required course for Science Majors – use as the Non-Literature Humanities
Humanities/ Fine Art/ 2nd Literature	<i>Choose 1</i>	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
Mathematics	→	Calculus A (MA 171 or MA 171S)
Natural Lab Science Sequence	<i>Choose 1</i>	Physics w/ Calculus I & II (PH 111/114 + PH 112/115) Biology I and II (BYS 119/L/R + BYS 120/L/R) Chemistry I and II (CH 121/125 + 123/126)
History	<i>Choose 1</i>	World History I (HY 103) World History II (HY 104)
Social & Behavioral Sciences	<i>Choose 2</i>	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) Sociological Perspective on Tech and Science (SOC 150) General Psychology (PY 101) Life Span Development (PY 201)
History or Social & Behavioral Sciences	<i>Choose 1</i>	Take either 2 nd History Course OR 3 rd Social & Behavioral Science
History or Literature Sequence	<i>Required</i>	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)

College of Science Requirement Choices

Additional Science or Engineering	<i>Choose 1</i>	Biology (BYS 119/L or BYS 120/L) Chemistry (CH 121/125) Physics (PH 111/114, PH 112/115, or PH 113/116) Astronomy (AST 106 or 107) Earth System Science (ESS 103 or 104)
Computer Science	<i>Choose 1</i>	Intro to C Programming (CS 102) Intro to Programming Using JAVA (CS 103) Intro to CS Using Python (CS 104)
Technical Writing	→	Technical Writing (EH 301) Required course for Science Majors
Technical Elective	→	Any 300 or 400 level College of Science course, CPE 412 or 436, PHL 317 or 320, IS422, 460, 463, 471, or 472. The final MA 300 or 400 course in the math minor may also count here

Completed	Course Number	Credits	Course Name	Prerequisites, Corequisites and/or Prerequisites with Concurrency*	Semester Usually Offered
Charger Foundations					
Area I: Freshman Composition 6 credits – see attached for more options					
<input type="checkbox"/>	EH 101	3	College Writing I	Placement*	FA/SP/SU
<input type="checkbox"/>	EH 102	3	College Writing II	EH 101 or EH 101S	FA/SP/SU
<input type="checkbox"/>	EH 103	3	Accelerated College Writing	Placement*	SP
<input type="checkbox"/>	EH 105	3	Honors English Seminar	Honors	FA
Area II: Fine Art and Humanities 12 credits					
<input type="checkbox"/>		3	Fine Art	See attached for choices	
<input type="checkbox"/>		3	Literature	Completion of Area I	
<input type="checkbox"/>	CM 113	3	Public Speaking	REQUIRED (use as Non-Literature Humanity)	FA/SP/SU
<input type="checkbox"/>	*	3	Humanities/Fine Arts/Literature	See attached for choices	
Area III: Math and Natural Science 12 credits					
Math 4 credits					
<input type="checkbox"/>	MA 171	4	Calculus A	MA 113, MA 115 or Level 3 Placement	FA/SP/SU
Lab Science 8 credits					
<input type="checkbox"/>	PH 111/114	3/1	Physics w/ Calculus I + Lab	MA 171	FA/SP/SU
<input type="checkbox"/>	PH 112/115	3/1	Physics w/ Calculus II + Lab	PH 111/114, MA 172	FA/SP/SU
<input type="checkbox"/>	BYS 119	4	Principles of Biology + Lab		FA/SP/SU
<input type="checkbox"/>	BYS 120	4	Organismal Biology + Lab		FA/SP/SU
<input type="checkbox"/>	CH 121/125	3/1	Gen Chemistry I + Lab	MA 112 or MA 113, 115, 120, 171 w/Conc	FA/SP/SU
<input type="checkbox"/>	CH 123/126	3/1	Gen Chemistry II + Lab	CH 121/125	FA/SP/SU
Area IV: History and Social & Behavioral Science 12 credits					
<input type="checkbox"/>		3	History		
<input type="checkbox"/>		3	Social & Behavioral Science	See attached for choices	
<input type="checkbox"/>		3	Social & Behavioral Science		
<input type="checkbox"/>	*	3	History/Social & Behavioral Science		
Area V: College of Science Requirements 25 credits					
<input type="checkbox"/>	FYE 101S	1	Charger Success – Science	REQUIRED	FA/SP
<input type="checkbox"/>		3	Intro to Computer Science	*See attached for choices	
<input type="checkbox"/>	EH 301	3	Technical Writing	EH 101, EH 102	FA/SP/SU
<input type="checkbox"/>		3	Additional (3rd) Lab Science Course	*See attached for choices	
<input type="checkbox"/>	MA 172	4	Calculus B	MA 171	FA/SP/SU
<input type="checkbox"/>	MA 201	4	Calculus C	MA 172	FA/SP/SU
<input type="checkbox"/>	MA 244	3	Intro to Linear Algebra	MA 172	FA/SP/SU
<input type="checkbox"/>	MA 385	3	Intro to Probability and Statistics	MA 201	FA/SP/SU
Note: to add a Math minor, take one additional MA 300 or 400 course. This course will also fulfill the Technical Elective in the CS Major.					
Computer Science Major Requirements 52 credits					
CS core 34 credits					
<input type="checkbox"/>	CS 121	3	Computer Science I	(CS 102, 103, OR 104), MA 113 w/Conc	FA/SP/SU
<input type="checkbox"/>	CS 214	3	Introduction to Discrete Structure	CS 121, MA 171	FA/SP/SU
<input type="checkbox"/>	CS 221	3	Computer Science II: Data Structures	CS 121, MA 113, Prereq w/Conc MA 171	FA/SP/SU
<input type="checkbox"/>	CS 309/309L	3	Switching Theory	CS 121, Prereq w/Conc CS 214	FA/SP
<input type="checkbox"/>	CS 317	3	Intro to Design & Analysis of Alg	MA 244, CS 214, CS 221	FA/SP/SU
<input type="checkbox"/>	CS 321	3	Intro Object-Oriented Prog Java	CS 308, CS 309/309L	FA/SP
<input type="checkbox"/>	CS 413/413L	3	Intro to Digital Computer Design	CS 317	FA/SP
<input type="checkbox"/>	CS 424	3	Programming Languages		FA/SP
<input type="checkbox"/>	CS 490	3	Intro to Operating Systems		FA/SP
<input type="checkbox"/>	CS 499	3	SR Prog: Team Software Design		FA/SP
<input type="checkbox"/>		3	Technical Elective	*See attached for choices	
Entertainment Computing Concentration 15 credits					
<input type="checkbox"/>	CS 143	3	Intro Tech Multimedia & Gaming		FA
Choose 1:					
<input type="checkbox"/>	CS 330	3	AI & Game Design	CS 143, CS 221	SP
<input type="checkbox"/>	CS 347	3	Intro Video Game Des & Prog	CS 221	FA
<input type="checkbox"/>	CS 371	3	Mobile Computing Apps	CS 221	FA
<input type="checkbox"/>	CS 445	3	Intro to Computer Graphics	CS 221 or 217, MA 244	FA/SP
Choose 1:					
<input type="checkbox"/>	CS 443	3	Intro to Multimedia Systems	CS 317	SP
<input type="checkbox"/>	CS 446	3	Advanced Computer Graphics	CS 445	FA
<input type="checkbox"/>	CS 447	3	Game Engines & Level Development	CS 330 or 347, CS 445	SP
Dramatic Media Elements Courses 6 credits					
Choose 2 (3 credits each): ARS 230, ARS 250, ARS 321, ARS 322, ARS 324, ARS 350, ARS 355, ARS 334, ARS 393, MU 106, MU 306, CM 340, EH 410, TH 255					
Elective Courses 7 credits					
Elective courses can be taken from any department and do not have to be taken in your major or minor					
<input type="checkbox"/>					
<input type="checkbox"/>					
<input type="checkbox"/>					
Total = 128 credits to graduate					
39 of the 128 credits must be taken @ 300 level or higher					

All prerequisite classes must be completed with a "C-" or higher grade.

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Literature	<i>Choose 1</i>	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 Non-Literature	<i>Required</i>	Public Speaking (CM 113) Required course for Science Majors – use as the Non-Literature Humanities
Humanities/ Fine Art/ 2nd Literature	<i>Choose 1</i>	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
Mathematics	→	Calculus A (MA 171 or MA 171S)
Natural Lab Science Sequence	<i>Choose 1</i>	Physics w/ Calculus I & II (PH 111/114 + PH 112/115) Biology I and II (BYS 119/L/R + BYS 120/L/R) Chemistry I and II (CH 121/125 + 123/126)
History	<i>Choose 1</i>	World History I (HY 103) World History II (HY 104)
Social & Behavioral Sciences	<i>Choose 2</i>	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) Sociological Perspective on Tech and Science (SOC 150) General Psychology (PY 101) Life Span Development (PY 201)
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History or Literature Sequence	<i>Required</i>	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)

College of Science Requirement Choices

Additional Science or Engineering	<i>Choose 1</i>	Biology (BYS 119/L or BYS 120/L) Chemistry (CH 121/125) Physics (PH 111/114, PH 112/115, or PH 113/116) Astronomy (AST 106 or 107) Earth System Science (ESS 103 or 104)
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Technical Writing	→	Technical Writing (EH 301) Required course for Science Majors
Technical Elective	→	Any 300 or 400 level College of Science course, CPE 412 or 436, PHL 317 or 320, IS422, 460, 463, 471, or 472. The final MA 300 or 400 course in the math minor may also count here