BACHELOR OF SCIENCE, MAJOR IN COMPUTING SCIENCE (INFORMATION SYSTEMS, IS)

Code	Title	Hours	
Bachelor of Science, Major in Computing Science (Information Systems, IS)			
Core Curriculum (catalog.shsu.edu/	undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum)		
Component Area I (Communication)		6	
Component Area II (Mathematics)	Component Area II (Mathematics)		
Component Area III (Life and Physical Science)			
Component Area IV (Language, Philosophy, and Culture)			
Component Area V (Creative Arts)		3	
Component Area VI (U.S. History)		6	
Component Area VII (Political Science/Government)		6	
Component Area VIII (Social and Behavioral Sciences)		3	
Component Area IX (Component Area Option)		3	
Degree Specific Requirements			
Electives (Advanced)		12	
MATH 1420	Calculus I 1, 2	4	
MATH 1430	Calculus II	4	
MATH 2395	Discrete Mathematics	3	
MATH (Advanced)		3	
STAT 3379	Statistical Methds in Practice	3	
Science (In addition to Component Area III)		8	
Total Hours		75	

The Computing Science major requires a total of 44 to 48 hours of Computer Science coursework, depending on concentration, which includes 26 hours of CS required courses and 19 to 22 hours of coursework, depending on concentration. General degree requirements must also be met. The 44 to 48 hours of coursework for the Computing Science major should be distributed as follows (Note: CSTE courses may not be used to meet this requirement):

Code	Title	Hours
Required Courses		
COSC 1436	Programming Fundamentals I	4
COSC 1437	Programming Fundamentals II	4
COSC 2329	Comp Organiz & Machine Lang	3
COSC 3318	Data Base Management Systems	3
COSC 3319	Data Structures and Algorithms	3
COSC 4318	Advanced Language Concepts	3
COSC 4319	Software Engineering	3
COSC 4349	Professionalism and Ethics	3
Total Hours		26

Code	Title	Hours
Information Systems Concentration	n	
COSC 2327	Intro to Computer Networks	3
COSC 2347	Special Topics/Programming	3
COSC 3337	Infor Sys Design & Management	3
COSC 4326	Network Theory	3
COSC 4149	Seminar in Computer Science	1
Advanced COSC/DFSC Electives		6
Total Hours		19

- MATH 1420 satisfies the Core Curriculum requirement for Component Area II (Mathematics), one semester credit hour of Component Area IX (Component Area Option), and the Degree Specific requirements.
- Students who are not eligible for enrollment in MATH 1420 will have additional mathematics requirements.

Note: The minimum number of credit hours required for a baccalaureate degree is 120. The minimum number of advanced credit hours for a baccalaureate degree is 42. Students may take free elective courses beyond the hours identified in the recommended 4-year plan to meet the overall credit hour and advanced credit hour requirements.

Component Area III (catalog shsu.edu/undergraduate/ academic-policies-procedures/degree-requirements- academic-policies-procedures/degree-requir	Fall	Hours Spring	Hours
COSC 1436	Component Area III (catalog.shsu.edu/undergraduate/	4 Component Area III (catalog.shsu.edu/undergraduate/	4
COSC 1436			
SENGL 1301	academic-guidelines/core-curriculum/#componentareaiii)	academic-guidelines/core-curriculum/#componentareaiii)	
MATH 1420 ^{2, 3} 4 MATH 1430 4 Second Year 15 15 Fall Hours Spring Hours Component Area IV (catalog.shsu.edu/undergraduate/ academic-policies-procedures/degree-requirements-academic-policies-proced		4 COSC 1437	4
Second Year Fall		3 ENGL 1302 ¹	3
Second Year Fall Hours Spring Hours Component Area IV (catalog shsu.edu/undergraduate/ academic-policies-procedures/degree-requirements-academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiv) 3 Component Area V (catalog, shsu.edu/undergraduate/ academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiv) 3 Component Area VIII (catalog, shsu.edu/undergraduate/ academic-guidelines/core-curriculum/#componentareaviii) 3 COSC 2329 3 cademic-guidelines/core-curriculum/#componentareaviii) 3 3 COSC 3318 3 COSC 2347 3 COSC 3318 3 3 POLS 2305 ⁵ 3 POLS 2306 ⁵ 3 3 POLS 2305 ⁵ 3 POLS 2306 ⁵ 3 3 Third Year Fall Hours Spring Hours Hours COSC 3319 3 Component Area IX (catalog, shsu.edu/undergraduate/ academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix) 3 Degree Specific Requirement: Science ⁶ 4 COSC 2327 3 STAT 3379 3 Third Year Fall Hours Spring	MATH 1420 ^{2, 3}	4 MATH 1430	4
Fall Hours Spring Hours Component Area IV (catalog, shsu.edu/undergraduate/ academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiv) 3 Component Area V(catalog, shsu.edu/undergraduate/ academic-guidelines/core-curriculum/#componentareaiv) 3 COSC 2329 3 academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaviii) 3 COSC 2329 3 academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaviii) 3 COSC 2329 3 Ams 10 COSC 2329 3 COSC 2329		15	15
Component Area IV (catalog shsu.edu/undergraduate/ academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiv) 3 Component Area V (catalog shsu.edu/undergraduate/ academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiv) 3 Component Area VIII (catalog shsu.edu/undergraduate/ academic-guidelines/core-curriculum/#componentareaiv) 3 CoSC 2329 3 Component Area VIII (catalog shsu.edu/undergraduate/ academic-guidelines/core-curriculum/#componentareaviii) 3 COSC 2329 3 COSC 2347 3 COSC 3318 3 HIST 1301 ⁴ 3 HIST 1302 ⁴ 3 POLS 2305 ⁵ 3 POLS 2306 ⁵ 3 Third Year 15 15 Fall Hours Spring Hours COSC 3319 3 Component Area IX (catalog shsu.edu/undergraduate/ academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix) 3 Degree Specific Requirement: Science ⁶ 4 COSC 2327 3 Electives (Advanced) 6 COSC 3337 3 MATH 2395 3 Degree Specific Requirement: Science ⁶ 4 Fourth Year Fourth Year Fall Hours Spring Hours COSC 4318 3 COSC 4319 3 COSC 4326 3 COSC 4449	Second Year		
academic-policies-procedures/degree-requirements- academic-guidelines/core-curriculum/#componentareaiv) Component Area VIII (catalog, shsu.edu/undergraduate/ academic-puidelines/core-curriculum/#componentareaviii) COSC 2347 3 COSC 2318 3 HIST 1301 ⁴ 3 HIST 1302 ⁴ 3 POLS 2305 ⁵ 3 POLS 2305 ⁵ 3 POLS 2305 ⁵ 3 POLS 2305 ⁵ 3 POLS 2306 ⁵ 3 POLS 2306 ⁵ 3 POLS 2305 ⁵ 3 POLS 2306 ⁵ 3 POLS	Fall	Hours Spring	Hours
academic-guidelines/core-curriculum/#componentareaiv)academic-guidelines/core-curriculum/#componentareav)Component Area VIII (catalog, shsu.edu/undergraduate/ academic-guidelines/core-curriculum/#componentareaviii)3 COSC 2329COSC 23473 COSC 33183HIST 130143 HIST 130243POLS 230553 POLS 230653Third YearThird YearThird YearFallHours SpringHoursCOSC 33193 Component Area IX (catalog, shsu.edu/undergraduate/ academic-guidelines/core-curriculum/#componentareaix)3Degree Specific Requirement: Science64 COSC 23273Electives (Advanced)6 COSC 33373MATH 23953 Degree Specific Requirement: Science64Fourth Year1616Fourth Year1616Fourth Year43FallHours SpringHoursCOSC 43183 COSC 43193COSC 43263 COSC 43493COSC 43263 COSC 44493Electives (Advanced)3 COSC 41491MATH (Advanced)3 Elective (Advanced)3 Elective (Advanced)3 Elective (Advanced)	Component Area IV (catalog.shsu.edu/undergraduate/	3 Component Area V (catalog.shsu.edu/undergraduate/	3
Component Area VIII (catalog.shsu.edu/undergraduate/ academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaviii) 3 COSC 2329 3 COSC 2347 3 COSC 3318 3 HIST 1301 ⁴ 3 HIST 1302 ⁴ 3 POLS 2305 ⁵ 3 POLS 2306 ⁵ 3 Third Year Fall Hours Spring Hours Spring Hours Spring Hours Spring Hours Spring A COSC 3319 A COSC 3327 3 2 Electives (Advanced) 6 COSC 3327 3 2 2 2 2 2 2 2 2 2 2 3 2 2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	academic-policies-procedures/degree-requirements-	academic-policies-procedures/degree-requirements-	
academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaviii) COSC 2347 3 COSC 3318 3 NIST 1301 ⁴ 3 HIST 1302 ⁴ 3 POLS 2305 ⁵ 3 POLS 2306 ⁵ 3 15 15 15 Third Year Fall Hours Spring Hours COSC 3319 3 Component Area IX (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix) 3 Degree Specific Requirement: Science ⁶ 4 COSC 2327 3 Electives (Advanced) 6 COSC 3337 3 MATH 2395 3 Degree Specific Requirement: Science ⁶ 4 5 TAT 3379 3 6 Fourth Year 16 16 Fall Hours Spring Hours COSC 4318 3 COSC 4319 3 COSC 4326 3 COSC 4349 3 COSC 4326 3 COSC 4149 1 Electives (Advanced) 3 COSC 4149 1 MATH (Advanced) 3 Elective (Advanced)	academic-guidelines/core-curriculum/#componentareaiv)	academic-guidelines/core-curriculum/#componentareav)	
COSC 2347 3 COSC 3318 3 HIST 1301 ⁴ 3 HIST 1302 ⁴ 3 POLS 2305 ⁵ 3 POLS 2306 ⁵ 3 Third Year Fall Hours Spring Hours COSC 3319 3 Component Area IX (catalog.shsu.edu/undergraduate/ academic-policies-procedures/degree-requirements-academic-poli		3 COSC 2329	3
COSC 2347 3 COSC 3318 3 HIST 1301 ⁴ 3 HIST 1302 ⁴ 3 POLS 2305 ⁵ 3 POLS 2306 ⁵ 3 15 15 15 Third Year Fall Hours Spring Hours COSC 3319 3 Component Area IX (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix) 3 Degree Specific Requirement: Science ⁶ 4 COSC 2327 3 Electives (Advanced) 6 COSC 3337 3 MATH 2395 3 Degree Specific Requirement: Science ⁶ 4 STAT 3379 3 Fourth Year Fall Hours Spring Hours COSC 4318 3 COSC 4319 3 COSC 4326 3 COSC 4349 3 COSC 4326 3 COSC /DFSC Advanced Elective 3 Electives (Advanced) 3 COSC 4149 1 MATH (Advanced) 3 Elective (Advanced) 3 Elective (Advanced) 3			
HIST 1301 ⁴ 3 HIST 1302 ⁴ 3 POLS 2305 ⁵ 3 POLS 2305 ⁵ 3 POLS 2305 ⁵ 3 POLS 2305 ⁵ 15 Third Year Fall Hours Spring Hours	-		
POLS 2305 ⁵ 3 POLS 2306 ⁵ 3 Third Year Fall Hours Spring Hours COSC 3319 3 Component Area IX (catalog.shsu.edu/undergraduate/ academic-policies-procedures/degree-requirements-academic-pulicies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix) Degree Specific Requirement: Science ⁶ 4 COSC 2327 3 Electives (Advanced) 6 COSC 3337 3 MATH 2395 3 Degree Specific Requirement: Science ⁶ 4 STAT 3379 3 Fourth Year Fall Hours Spring Hours COSC 4318 3 COSC 4319 3 COSC 4326 3 COSC 4349 3 COSC 4326 3 COSC 4349 3 Electives (Advanced) 3 COSC 4149 1 MATH (Advanced) 3 Elective (Advanced) 3 Elective (Advanced) 3			3
15 15 Third Year Fall Hours Spring Hours COSC 3319 3 Component Area IX (catalog.shsu.edu/undergraduate/ academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix) 3 Degree Specific Requirement: Science ⁶ 4 COSC 2327 3 3 Electives (Advanced) 6 COSC 3337 3 3 MATH 2395 3 Degree Specific Requirement: Science ⁶ 4 5 5 4 5 5 4 5 5 7 3 3 5 7 3 5 7 3 5 7 3 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	HIST 1301 ⁴		3
Third YearFallHours SpringHoursCOSC 33193 Component Area IX (catalog.shsu.edu/undergraduate/ academic-policies-procedures/degree-requirements- academic-guidelines/core-curriculum/#componentareaix)3Degree Specific Requirement: Science64 COSC 23273Electives (Advanced)6 COSC 33373MATH 23953 Degree Specific Requirement: Science64STAT 33793To1616Fourth YearFallHours SpringHoursCOSC 43183 COSC 43193COSC 43263 COSC 43493COSC 43263 COSC 43493Electives (Advanced)3 COSC 41491MATH (Advanced)3 Elective (Advanced)3	POLS 2305 ⁵	3 POLS 2306 ⁵	3
Fall Hours Spring Hours COSC 3319 3 Component Area IX (catalog.shsu.edu/undergraduate/ academic-policies-procedures/degree-requirements- academic-guidelines/core-curriculum/#componentareaix) 3 Degree Specific Requirement: Science ⁶ 4 COSC 2327 3 Electives (Advanced) 6 COSC 3337 3 MATH 2395 3 Degree Specific Requirement: Science ⁶ 4 STAT 3379 3 Fourth Year 16 16 Fall Hours Spring Hours COSC 4318 3 COSC 4319 3 COSC 4326 3 COSC 4349 3 COSC 4326 3 COSC /DFSC Advanced Elective 3 Electives (Advanced) 3 COSC 4149 1 MATH (Advanced) 3 Elective (Advanced) 3		15	15
COSC 3319 3 Component Area IX (catalog.shsu.edu/undergraduate/ academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix) Degree Specific Requirement: Science ⁶ 4 COSC 2327 5 Electives (Advanced) 6 COSC 3337 MATH 2395 3 Degree Specific Requirement: Science ⁶ 4 STAT 3379 3 Degree Specific Requirement: Science ⁶ 4 STAT 3379 3 Degree Specific Requirement: Science ⁶ 4 STAT 3379 3 Degree Specific Requirement: Science ⁶ 4 STAT 3379 3 Degree Specific Requirement: Science ⁶ 4 Degree Specific Requirement: Science ⁶ 4 Degree Specific Requirement: Science ⁶ 5 Degree Specific Requirement: Science ⁶ 4 De	Third Year		
academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix) Degree Specific Requirement: Science ⁶ 4 COSC 2327 Electives (Advanced) 6 COSC 3337 MATH 2395 3 Degree Specific Requirement: Science ⁶ 4 STAT 3379 3 Fourth Year Fall Hours Spring Hours COSC 4318 3 COSC 4319 3 COSC 4319 3 COSC 4326 3 COSC 4349 3 COSC 4326 3 COSC 4349 5 Electives (Advanced) 3 COSC 4149 5 MATH (Advanced) 3 Elective (Advanced)	Fall	Hours Spring	Hours
academic-guidelines/core-curriculum/#componentareaix) Degree Specific Requirement: Science ⁶ 4 COSC 2327 3 Electives (Advanced) 6 COSC 3337 3 MATH 2395 3 Degree Specific Requirement: Science ⁶ 4 STAT 3379 3 6 COSC 3337 16 16 Fourth Year Fall Hours Spring Hours COSC 4318 3 COSC 4319 3 COSC 4326 3 COSC 4349 3 COSC 4326 3 COSC Advanced Elective 3 Electives (Advanced) 3 COSC 4149 1 MATH (Advanced) 3 Elective (Advanced) 3	COSC 3319	3 Component Area IX (catalog.shsu.edu/undergraduate/	3
Degree Specific Requirement: Science ⁶ 4 COSC 2327 3 Electives (Advanced) 6 COSC 3337 3 MATH 2395 3 Degree Specific Requirement: Science ⁶ 4 STAT 3379 3 16 16 Fourth Year Fall Hours Spring Hours COSC 4318 3 COSC 4319 3 COSC/DFSC Advanced Elective 3 COSC 4349 3 COSC 4326 3 COSC/DFSC Advanced Elective 3 Electives (Advanced) 3 COSC 4149 1 MATH (Advanced) 3 Elective (Advanced) 3		academic-policies-procedures/degree-requirements-	
Electives (Advanced) 6 COSC 3337 3 MATH 2395 3 Degree Specific Requirement: Science ⁶ 4 STAT 3379 3 16 16 Fourth Year Fall Hours Spring Hours COSC 4318 3 COSC 4319 3 COSC/DFSC Advanced Elective 3 COSC 4349 3 COSC 4326 3 COSC/DFSC Advanced Elective 3 Electives (Advanced) 3 COSC 4149 1 MATH (Advanced) 3 Elective (Advanced) 3		academic-guidelines/core-curriculum/#componentareaix)	
MATH 2395 3 Degree Specific Requirement: Science 6 4 STAT 3379 3 Fourth Year Fall Hours Spring Hours COSC 4318 3 COSC 4319 3 COSC/DFSC Advanced Elective 3 COSC 4349 3 COSC 4326 3 COSC 4149 3 Electives (Advanced) 3 COSC 4149 1 MATH (Advanced) 3 Elective (Advanced) 3	Degree Specific Requirement: Science ⁶	4 COSC 2327	3
STAT 3379 3 Fourth Year Hours Spring Hours COSC 4318 3 COSC 4319 3 COSC/DFSC Advanced Elective 3 COSC 4349 3 COSC 4326 3 COSC 4749 3 Electives (Advanced) 3 COSC 4149 1 MATH (Advanced) 3 Elective (Advanced) 3	Electives (Advanced)	6 COSC 3337	3
Fourth Year Hours Spring Hours COSC 4318 3 COSC 4319 3 COSC/DFSC Advanced Elective 3 COSC 4349 3 COSC 4326 3 COSC/DFSC Advanced Elective 3 Electives (Advanced) 3 COSC 4149 1 MATH (Advanced) 3 Elective (Advanced) 3	MATH 2395	3 Degree Specific Requirement: Science ⁶	4
Fourth Year Fall Hours Spring Hours COSC 4318 3 COSC 4319 3 COSC/DFSC Advanced Elective 3 COSC 4349 3 COSC 4326 3 COSC DFSC Advanced Elective 3 Electives (Advanced) 3 COSC 4149 1 MATH (Advanced) 3 Elective (Advanced) 3		STAT 3379	3
Fall Hours Spring Hours COSC 4318 3 COSC 4319 3 COSC/DFSC Advanced Elective 3 COSC 4349 3 COSC 4326 3 COSC/DFSC Advanced Elective 3 Electives (Advanced) 3 COSC 4149 1 MATH (Advanced) 3 Elective (Advanced) 3		16	16
COSC 4318 3 COSC 4319 3 COSC/DFSC Advanced Elective 3 COSC 4349 3 COSC 4326 3 COSC/DFSC Advanced Elective 3 Electives (Advanced) 3 COSC 4149 1 MATH (Advanced) 3 Elective (Advanced) 3	Fourth Year		
COSC/DFSC Advanced Elective 3 COSC 4349 3 COSC 4326 3 COSC/DFSC Advanced Elective 3 Electives (Advanced) 3 COSC 4149 1 MATH (Advanced) 3 Elective (Advanced) 3	Fall	Hours Spring	Hours
COSC 4326 3 COSC/DFSC Advanced Elective 3 Electives (Advanced) 3 COSC 4149 1 MATH (Advanced) 3 Elective (Advanced) 3	COSC 4318	3 COSC 4319	3
Electives (Advanced) 3 COSC 4149 1 MATH (Advanced) 3 Elective (Advanced) 3	COSC/DFSC Advanced Elective	3 COSC 4349	3
MATH (Advanced) 3 Elective (Advanced) 3	COSC 4326	3 COSC/DFSC Advanced Elective	3
MATH (Advanced) 3 Elective (Advanced) 3	Electives (Advanced)	3 COSC 4149	1
	MATH (Advanced)	3 Elective (Advanced)	3
	·	15	

Total Hours: 120

Satisfies Core Curriculum requirement for Component Area I (Communications).

MATH 1420 (catalog.shsu.edu/archives/2019-2020/search/?P=MATH%201420) satisfies the Core Curriculum requirement for Component Area II (Mathematics), one semester credit hour of Component Area IX (Component Area Option), and the Degree Specific requirements.

³ Students who are not eligible for enrollment in MATH 1420 will have additional mathematics requirements.

Satisfies Core Curriculum requirement for Component Area VI (U.S. History).

- Satisfies Core Curriculum requirement for Component Area VII (Political Science/Government).
- Science beyond Component Area III (Life and Physical Science).

Note: The minimum number of credit hours required for a baccalaureate degree is 120. The minimum number of advanced credit hours for a baccalaureate degree is 42. Students may take free elective courses beyond the hours identified in the recommended 4-year plan to meet the overall credit hour and advanced credit hour requirements.