

BACHELOR OF SCIENCE, MAJOR IN COMPUTING SCIENCE (COMPUTER SCIENCE, CS)

Bachelor of Science, Major in Computing Science (Computer Science, CS)

Core Curriculum (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum)

Component Area I (Communications)	6
Component Area II (Mathematics)	3
Component Area III (Life and Physical Science)	8
Component Area IV (Language, Philosophy, and Culture)	3
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)	4
Degree Specifics Requirements	
Electives (Advanced)	12
MATH 1420 Calculus I	4
MATH 1430 Calculus II	4
MATH 2395 Discrete Mathematics	3
Math (Advanced)	3
STAT 3379 Statistical Methods In Practice	3
Science (In addition to Component Area III)	8
Total Hours	79

The Computing Science major requires a total of 44 hours of Computer Science coursework, which includes 26 hours of CS required courses and 18 hours of coursework within one of three concentrations. General degree requirements must also be met. The 44 hours of coursework for the Computer 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

Computer Science Concentration (18 hours)

COSC 2347	Special Topics/Programming	3
COSC 3327	Computer Architecture	3
COSC 4316	Compiler Design & Construction	3
COSC 4327	Computer Operating Systems	3
Advanced COSC		6
Total Hours		18

¹ MATH 1420 satisfies the requirement for Component Area II and for one hour of Component Area IX in the core Curriculum. Math 1420 also meets 4 hours of Mathematics credit in the degree specific requirements.

² Eight hours of science courses satisfies the requirement for Component Area III and the degree specific 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.

First Year

Fall	Hours Spring	Hours
COSC 1436	4 COSC 1437	4
MATH 1420 ¹	4 MATH 1430	4
ENGL 1301 ²	3 ENGL 1302 ²	3
Component Area III (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiii)	4 Component Area III (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiii)	4
	15	15

Second Year

Fall	Hours Spring	Hours
COSC 2329	3 COSC 3318	3
POLS 2305 ³	3 COSC 2347	3
HIST 1301 ⁴	3 HIST 1302 ⁴	3
Component Area IV (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiv)	3 POLS 2306 ³	3
Component Area VIII (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaviii)	3 Component Area V (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareav)	3
	15	15

Third Year

Fall	Hours Spring	Hours
COSC 3319	3 COSC 3327	3
MATH 2395	3 COSC 4327	3
Science beyond Component Area III (Degree Specific Requirement)	4 STAT 3379	3
General Electives	6 Science beyond Component Area III (Degree Specific Requirement)	4
	Component Area IX (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix)	3
	16	16

Fourth Year

Fall	Hours Spring	Hours
COSC 4318	3 COSC 4319	3
COSC 4316	3 COSC 4349	3
ADV MATH	3 ADV COSC/DFSC Elective	3
ADV COSC/DFSC Elective	3 ADV General Elective	3
ADV General Elective	3 General Elective	1
	15	13

Total Hours: 120

¹ Satisfies Core Component Area II and one hour of Core Component Area IX.

² Satisfies Core Component Area I.

³ Satisfies Core Component Area VII.

⁴ Satisfies Core Component Area VI.