

BACHELOR OF SCIENCE, MAJOR IN COMPUTING SCIENCE (INFORMATION ASSURANCE, IA)

Bachelor of Science, Major in Computing Science (Information Assurance, IA)

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 Specific Requirement		
Electives (Advanced)	12	
MATH 1420	Calculus I ¹	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

Information Assurance Concentration (18 hours)

DFSC 1316	DF and IA Fundamentals I	3
DFSC 2316	DF and IA Fundamentals II	3
COSC 2347	Special Topics/Programming	3
DFSC 3316	Cryptography and Network Scrty	3
DFSC 4317	Information Security	3
Advanced DFSC Electives		3
Total Hours		18

¹ MATH 1420 satisfies the requirement for Component Area II and one hour of Component Area IX, and the degree specific requirements.

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

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 2347	3
HIST 1301 ³	3 COSC 3318	3
POLS 2305 ⁴	3 HIST 1302 ³	3
Component Area IV (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiv)	3 POLS 2306 ⁴	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
DFSC 1316	3 DFSC 2316	3
MATH 2395	3 STAT 3379	3
ADV Electives	3 Component Area IX (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix)	3
Science beyond Component Area III (Degree Specific Requirement)	4 Science beyond Component Area III (Degree Specific Requirement)	4
	16	16

Fourth Year

Fall	Hours Spring	Hours
COSC 4318	3 COSC 4319	3
DFSC 3316	3 COSC 4349	3
ADV MATH	3 DFSC 4317	3
ADV DFSC Elective	3 ADV Elective	3
Elective	3 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 VI.
- ⁴ Satisfies Core Component Area VII.