

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

## 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](http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum))

Component Area I (Communication)	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
<b>Degree Specific Requirements</b>	
Electives (Advanced)	12
MATH 1420	Calculus I <sup>1</sup>
MATH 1430	Calculus II
MATH 2395	Discrete Mathematics
MATH (Advanced)	3
STAT 3379	Statistical Methods In Practice
Science (In addition to Component Area III)	8
<b>Total Hours</b>	<b>79</b>

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
<b>Required Courses</b>		
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
<b>Total Hours</b>		<b>26</b>

### Information Systems Concentration

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
Advanced COSC/DFSC Electives		6
<b>Total Hours</b>		<b>18</b>

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

<sup>2</sup> 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**

<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
COSC 1436	4 COSC 1437	4
MATH 1420 <sup>1</sup>	4 MATH 1430	4
ENGL 1301 <sup>2</sup>	3 ENGL 1302 <sup>2</sup>	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**

<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
COSC 2347	3 COSC 2329	3
HIST 1301 <sup>3</sup>	3 COSC 3318	3
POLS 2305 <sup>4</sup>	3 HIST 1302 <sup>3</sup>	3
Component Area IV (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiv)	3 POLS 2306 <sup>4</sup>	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**

<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
COSC 3319	3 COSC 2327	3
MATH 2395	3 COSC 3337	3
Science beyond Component Area III (Degree Specific Requirement)	4 STAT 3379	3
ADV 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**

<b>Fall</b>	<b>Hours Spring</b>	<b>Hours</b>
COSC 4318	3 COSC 4319	3
COSC 4327	3 COSC 4349	3
ADV COSC/DFSC Elective	3 ADV COSC/DFSC Elective	3
ADV MATH	3 ADV Elective	3
ADV Electives	3 Elective	1
	15	13

Total Hours: 120

<sup>1</sup> Satisfies Core Component Area II and one hour of Core Component Area IX.

<sup>2</sup> Satisfies Core Component Area I.

<sup>3</sup> Satisfies Core Component Area VI.

<sup>4</sup> Satisfies Core Component Area VII.