COMPUTER SCIENCE - INFORMATION ASSURANCE (BACHELOR OF SCIENCE)

The Computer Science major emphasizes the development of large software systems. It consists of prescriptive courses and elective courses.

Course	Title	Credits
Jax MIX General Education Curriculum		41

Course	Title	Credits
Prescriptive Courses		
CS 230	Fundamentals of Computing	3
CS 231	Computer Programming I	3
CS 232	Computer Programming II	3
CS 234	Discrete Computational Structures	3
CS 304	Technical Writing for Computer Science (WI)	3
CS 310	Software Engineering I	3
CS 331	Data Structures and Algorithms	3
CS 333	Computer Organization and Architecture	3
CS 350	Fundamentals of Computer Operating Systems	3
CS 450	Computer Networking	3
CS 462	Ethics and Legal Issues (WI)	3
CS 488	Database Systems	3
CS 491	Software Engineering II	3
Information Assurance		
CS 307	Management of Information Security and Forensics	3
CS 308	Embedded and Control Systems Security	3
CS 470	Computer Security	3
Select one of the following:		3
CS 412	Disaster Response & Recovery	
CS 425	Web Application Development Using Web Services	
CS 461	Critical Infrastructure	

Courses in the major may not be taken until all prerequisites are completed with a grade of "C" or better.

In addition to the major courses, support courses required are:

Course	Title	Credits
MS 125	Calculus I	4
MS 126	Calculus II	4
MS 302	Applied Probability and Statistics	3
MS 352	Linear Algebra	3

Note: This schedule reflects the computer science program beginning with MS 125 (https://catalog.jsu.edu/search/?P=MS%20125) Calculus I (4). Freshman computer science majors needing additional preparation before beginning calculus will be placed in the appropriate algebra or precalculus courses that provide this preparation. See advisor.

In addition to courses noted below, candidates for graduation must successfully complete all JSU Academic Regulations. **More information about Jax MIX requirements (https://catalog.jsu.edu/undergraduate/jax-mix-requirements/) and Alabama Transfers equivalents (https://catalog.jsu.edu/undergraduate/alabama-transfers-equivalents/) can be found in their respective section of the catalog.**

Freshman		
Fall		**Hours**
Jax MIX Communication: EH Composition Sequence		3
Jax MIX Inquiry: Science Sequence		4
CS 201	Introduction to Information Technology	3
CS 230	Fundamentals of Computing	3
SSC 101	First Year Experience	0
	Hours	**13**
Spring		
Jax MIX Communication: EH Composition Sequence		3
EH 141	Speech (Jax MIX Communication)	3
Jax MIX Inquiry: Science Sequence		4
CS 231	Computer Programming I	3
CS 234	Discrete Computational Structures	3
	Hours	**16**
Sophomore		
Fall		
Jax MIX Expression: Fine Arts		3
MS 125	Calculus I (Jax MIX Communication)	4
Jax MIX Experience: History		3
CS 232	Computer Programming II	3
CS 304	Technical Writing for Computer Science (WI)	3
	Hours	**16**
Spring		
Jax MIX Experience (History if sequence) [1]		3
MS 126	Calculus II	4
CS 310	Software Engineering I	3
CS 331	Data Structures and Algorithms	3
CS 333	Computer Organization and Architecture	3
	Hours	**16**
Junior		
Fall		
Jax MIX Expression: Literature		3
Jax MIX Experience: Social/Behavioral Science		3
CS 488	Database Systems	3
Computer Science Electives [2]		3
MS 302	Applied Probability and Statistics	3
	Hours	**15**
Spring		
Jax MIX Expression (Literature if sequence) [1]		3
Jax MIX Experience: Social/Behavioral Science		3
CS 350	Fundamentals of Computer Operating Systems	3
CS 491	Software Engineering II	3
MS 352	Linear Algebra	3
	Hours	**15**
Senior		
Fall		
CS 450	Computer Networking	3
Computer Science Electives [2]		3
Electives		8
	Hours	**14**
Spring		
CS 462	Ethics and Legal Issues (WI)	3
Computer Science Electives [2]		3
Computer Science Electives [2]		3

Electives	6
Hours	**15**
Total Hours	**120**

1 Either a history sequence or a literature sequence is required.

2 Refer to specific elective requirements for each concentration.