Computer Science (BS)

Degree Requirements

Computer Science (BS)		Course Title	Credit Hours
Requirements: Forty-nine (49) credit hours, with a minimum grade of "C" in each course, are required as follows			49
CA 275	3 hrs	Small Group Discussion	
EH 372	3 hrs	Technical Writing (W)	
CSC 190	1 hr	Introduction to Computer Science	
CSC 120	4 hrs	Problem Solving and Programming Concepts	
CSC 228	3 hrs	Digital Logic and Comp Architecture	
CSC 231	4 hrs	Introduction to Data Structures and Algorithms	
CIS 300	1 hr	Information Technology in Society	
CSC 311	3 hrs	Networking and Communications	
CSC 320	3 hrs	Computer Organization and Architecture	
CSC 322	3 hrs	Operating Systems	
CSC 331	3 hrs	Software Engineering Principles (W)	
CSC 332	3 hrs	Advanced Data Structures and Algorithms	
CSC 333	3 hrs	Program Language Theory	
CSC 399	3 hrs	Concurrency and Distributed Computing	
CSC 440	3 hrs	Secure Software Engineering	
CSC 434	3 hrs	Formal Language and Automata Theory	
CIS 497	3 hrs	Senior Project (W)	
CIS 498	0 hrs	Senior Seminar	
Computer Science Electives - Twelve (12) credit hours, with a minimum grade of "C" in each course, are required. Select any four (4) of the following courses:			12
CSC 410	3 hrs	Compiler Design & Construction	
CSC 412	3 hrs	Real-Time Systems	
CSC 413	3 hrs	Computer Graphics	
CSC 416	3 hrs	Artificial Intelligence Theory and Programming	
CSC 417	3 hrs	Game Development	
CSC 418	3 hrs	Advanced Game Development	
CSC 428	3 hrs	Introduction to Bioinformatics	
CIS 324 or CSC 324	3 hrs 3hrs	Database Design-Dev-Mgt Database Concepts	
CIS 494	3 hs	Directed Study	

CSC 450	3 hrs	Surreptitious Software
CSC 457	3 hrs	Data Warehousing
CSC 485	3 hrs	Cyber Physical Security
CSC 490	3 hrs	Computer Science Special Topics
ISC 472	3 hrs	Advanced Data Management
Computer Science General Studies Electives - Hours as needed to meet degree and 123 semester hour requirement. All General Studies Electives must be approved by the Computer Science Coordinator.		

Department Information

Department of Computer Science Staff	
Associate Professor & Computer Science Chair	Dr. Tom Johnsten

Department of Computer Science website
https://www.southalabama.edu//colleges/soc/computerscience

Computer Science is a discipline that involves the understanding and design of computers and computational processes. In its most general form, it is concerned with the understanding of information transfer and transformation. Particular interest is placed on making processes efficient and endowing them with some form of intelligence. The discipline includes both advancing the fundamental understanding of algorithms and information processes in general, as well as the practical design of efficient, reliable software to meet given specifications. Courses offer students the opportunity to explore current trends in computing such as: information assurance, big data, video game development, computer graphics and robotics.