

BACHELOR OF SCIENCE IN COMPUTER SCIENCE (8-12 COMPUTER SCIENCE CERTIFICATION)

(Update 8/2/2018: Not accepting new students into the Bachelor of Science in Computer Science (8-12 Computer Science Certification) during the 2018-19 academic year.)

Total Semester Credit Hours (sch): 120-124

Major: 42 sch **Minor: 20 sch**
COMPSCI.BS CIP Code: 11.0101.00

Degree Requirements

Texas Core Curriculum

Code	Title	SCHs
ENG 1013	Composition I	3
ENG 1023	Composition II	3
Mathematics		3
Life & Physical Sciences		6
Language, Philosophy, & Culture		3
Creative Arts		3
HIST 1013	History of the United States, 1492-1865	3
HIST 1023	History of the United States, 1865 to the Present	3
GOV 2013	U.S. National Government	3
GOV 2023	Texas Government	3
Social & Behavioral Sciences		3
CAO: Women's Studies		3
CAO: First Year Seminar, Wellness or Mathematics		3
Total SCHs		42

Courses Required for Major

Code	Title	SCHs
CSCI 1423	Programming Fundamentals I	3
CSCI 2443	Computer Organization and Machine Language	3
CSCI 2493	Programming Fundamentals II	3
CSCI 3013	Applied Computational Thinking	3
CSCI 3053	Data Structures	3
CSCI 3413	Software Engineering	3
CSCI 3423	Database Management	3
CSCI 3443	Digital Logic and Computer Architecture	3
CSCI 3613	Introduction to Algorithms	3
CSCI 4313	Networking and Data Communication	3
Computer Science Electives		
Select 12 additional semester credit hours in computer science to be selected with a computer science advisor.		12
Other Requirements ("C" or higher required)		
CSCI 3002	Advanced Computing Technology	2

EDSP 4203	Learners with Exceptionalities	3
FS 3513	Childhood and Adolescence	3
READ 3013	Literacy and Learning across the Curriculum	3
Electives		3
MATH 3013	Discrete Mathematics	3
MATH 3073 or MATH 4013	Matrix Methods Probability and Statistics	3
Minor - Teaching		
EDUC 2003	Schools and Society	3
EDUC 3003	Learning Theory and Development	3
EDUC 3482	Teaching Diverse Learners Through Technology Integration	2
EDUC 4113	Design and Implementation of Instruction and Assessment	3
EDUC 4243	Classroom Environment and Management	3
EDUC 4226	Student Teaching: Computer Science	6
Total SCHs		82

All students must complete 3 semester credit hours in approved Global Perspective courses (graduation requirement).

Plan of Study

First Year

Fall		TCCN	SCHs
ENG 1013	Composition I	ENGL 1301	3
HIST 1013	History of the United States, 1492-1865	HIST 1301	3
Life/Physical Science Core			3
CSCI 1423	Programming Fundamentals I	COSC 1436	3
MATH 1313	Elementary Analysis II	MATH 1316	3
UNIV 1231	Learning Frameworks: The First Year Experience	EDUC 1100, EDUC 1200, EDUC 1300	1
			SCHs
			16

Spring

Spring		TCCN	SCHs
ENG 1023	Composition II	ENGL 1302	3
HIST 1023	History of the United States, 1865 to the Present	HIST 1302	3
CSCI 2493	Programming Fundamentals II	COSC 1437	3
MATH 2014	Calculus I	MATH 2413	4
Creative Arts Core			3
			SCHs
			16

Second Year

Fall		TCCN	SCHs
GOV 2013	U.S. National Government	GOVT 2305	3
CSCI 3053	Data Structures		3

CSCI 3423	Database Management		3	Fourth Year		
CSCI 3002	Advanced Computing Technology		2	Fall	TCCN	
Language, Philosophy, and Culture Core			3	CSCI elective (Major)		3
				CSCI elective (Major)		3
				EDUC 4113	Design and Implementation of Instruction and Assessment	3
	SCHs		14			
Spring		TCCN		EDUC 4243	Classroom Environment and Management	3
GOV 2023	Texas Government	GOVT 2306	3	CSCI 4313	Networking and Data Communication	3
CSCI 2443	Computer Organization and Machine Language	COSC 2425	3	MATH 3073	Matrix Methods	3
CSCI 3013	Applied Computational Thinking		3		SCHs	18
Life/Physical Science Core			3	Spring	TCCN	
Social/Behavioral Sciences Core			3	EDUC 4126	Student Teaching: Mathematics	6
	SCHs		15		SCHs	6
Third Year					Total SCHs:	120
Fall		TCCN				
CSCI 3443	Digital Logic and Computer Architecture		3	(GP) satisfies global perspectives graduation requirement.		
CSCI Elective (Major)			3			
CSCI Elective (Major)			3			
EDSP 4203	Learners with Exceptionalities		3			
EDUC 2003	Schools and Society	EDUC 1301	3			
	SCHs		15			
Spring		TCCN				
CSCI 3413	Software Engineering		3			
CSCI 3613	Introduction to Algorithms		3			
MATH 3013	Discrete Mathematics		3			
EDUC 3003	Learning Theory and Development		3			
EDUC 3482	Teaching Diverse Learners Through Technology Integration		2			
READ 3013	Literacy and Learning across the Curriculum		3			
MATH 2053 (Recommended for Global Perspective Requirement)	Women and Minorities in Engineering, Mathematics, and Science		3			
	SCHs		20			