

**CURRICULUM SUMMARY FOR THE BACHELOR OF SCIENCE IN
COMPUTER SCIENCE
COMPUTER NETWORKS Concentration
TOTAL CREDITS REQUIRED:122**

CORE CURRICULUM (STANDARD)*		MAJOR (COMPUTER SCIENCE)	OTHER REQUIREMENTS	MINOR REQUIREMENTS
TSU COURSES	TCCNS EQUIVALENT			
42 credits		60 credits	20 credits	0 credits
<u>Communication:</u>		CS 124 (3)	MATH 241 (4)	
ENG 131 (3) **	ENGL 1301	CS 140 (3)	MATH 242 (4)	
ENG 132 (3)	ENGL 1302	CS 241 (3)	MATH 250 (3)	
<u>Mathematics:</u>		CS 243 (3)	MATH 473 (3) or MATH 345 (3)	
MATH 136 (3)	MATH 2312	CS 246 (3)	PHYS 213 (1)	
<u>Life and physical sciences:</u>		CS 248 (3)	PHYS 214 (1)	
CHEM 131 or BIOL 143 (3)	CHEM 1311or BIOL 1308	CS 250 (3)	PHYS 238 (3)	
PHYS 237 (3)	PHYS 1301	CS 251 (3)	FS 102 (1)	
<u>Language, philosophy, and culture:</u>		CS 342 (3)		
ENG 2xx (3) ***		CS 343 (3)		
<u>Creative arts:</u>		CS 346 (3)		
MUSI 136 or ART 135 (3)	MUSI 1306 OR ARTS 1301	CS 350 (3)		
<u>American history:</u>		CS 351 (3)		
HIST 231 (3)	HIST 1301	CS 415 (3)		
HIST 232 (3)	HIST 1302	CS 444 (3)		
<u>Government/political science:</u>		CS 450 (3)		
POLS 235 (3)	GOVT 2305	CS 451 (3)		
POLS 236 (3)	GOVT 2306	CS 456 (3)		
<u>Social and behavioral sciences:</u>		CS 499 (3)		
ECON 231 (3)	ECON 2301	CS 3xx or 4xx or 5xx (3)		
<u>Institutional Options:</u>				
SC 135 or SC 136 (3)	SPCH 1321 or SPCH 1315			
CS 120 (3)	COSC 1336 or 1436			

* Students should be advised by a major advisor prior to registering for any credit, particularly any core curriculum credit as listed.

** (N) represents the number of course credits.

*** ENG 230, ENG 231, ENG 235, or ENG 244 (TCCN: ENGL 2332, ENGL 2333, ENGL 2326, or ENGL 2326)

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First Year	FIRST SEMESTER		SECOND SEMESTER	
	CS 120 Introduction to Programming using C++	3	CS 124 Fund of Machine Comp	3
	MATH 136 Precalculus	3	CS 140 Computer Programming in Java	3
	CHEM 131 or BIOL 143 General Chemistry, Survey of Life Science	3	MATH 241 Calculus & Analytic Geometry I	4
	ENG 131 Freshman English I	3	ENG 132 Freshman English II	3
	MUSI 136 or ART 135 (3) Music Appreciation or Topics in Contemp Art & Culture	3	SC 135 or 136 Business & Professional Communication or Public Address	3
	FS 102 Freshman Seminar	1		
		16 Hrs		16 Hrs

Second Year	THIRD SEMESTER		FOURTH SEMESTER	
	CS 241 Object Oriented Using C++	3	CS 246 Data & File Structures	3
	CS 243 Computer Organization	3	CS 248 Theory of Computation	3
	CS 250 Computer Networks Fundamentals	3	CS 251 Internetworking and Routing Basics	3
	MATH 242 Calculus & Analytic Geometry. II	4	MATH 250 Linear Algebra	3
	PHYS 213 College Physics Lab I	1	PHYS 214 College Physics Lab II	1
	PHYS 237 College Physics I	3	PHYS 238 College Physics II	3
		17 Hrs		16 Hrs

Third Year	FIFTH SEMESTER		SIXTH SEMESTER	
	CS 342 Programming Languages and Design	3	CS 343 Microprocessors Design	3
	CS 346 Database Management Systems	3	CS 351 Wide Area Networks Technologies	3
	CS 350 Local Area Networks Fundamentals	3	POLS 236 American Political Systems II	3
	POLS 235 American Political Systems I	3	HIST 232 Social & Political History of the United States since 1877	3
	HIST 231 Social & Political History of the United States to 1877	3	ENG 2XX Any 200 Level ENG may be selected	3
		15 Hrs		15 Hrs

Fourth Year	SEVENTH SEMESTER		EIGHTH SEMESTER	
	CS 415 Computer Ethics and Society	3	CS 444 Operating Systems	3
	CS 450 Network Management and Security	3	CS 451 Introduction to Wireless and Mobile Networks	3
	CS 300 / 400 / 500 Elective	3	CS 456 Software Engineering	3
	MATH 345 Applied Math for Scientists or MATH 473 Probability and Statistics I	3	CS 499 Capstone Project	3
	ECON 231 Principles of Economics I	3		
		15 Hrs		12 Hrs