

**2018-2019 B.S. Computer Science and Technology – Computer Science Concentration
CORE CURRICULUM – 43-44 Semester Hours (SH)**

A. Core Foundations

CORE 101	_____	3
CORE 102	_____	3
HNRS 103	_____	3
CORE 201 PHIL 111: 213	_____	3
CORE 202 PHIL 112	_____	3

NOTE: Courses listed in multiple areas can only be used to fulfill a single area requirement.

Students can use two courses with their major prefix to fulfill core requirements.

B. Core Skills & Knowledge

<u>MATHEMATICAL SCIENCES (3SH)</u>	
MATH 171	_____ 3
<u>NATURAL SCIENCES (4 SH)</u>	
PHYS 221	_____ 4
<u>HUMANITIES (3 SH)</u>	
_____	_____ 3
One of the following: CLSS:110 CCST: 110 ENGL 200, HIST 101, 102 PHIL 111, 112, 200; POSC 110; RELN 111, 112, 203, 206	
<u>VISUAL & PERFORMING ARTS (3 SH)</u>	
_____	_____ 3
One of the following: ART 100, 215, 216 CVPA 266 DNCE 111 MUSC 100, 121, 123 THEA 100, 180	
<u>SOCIAL/BEHAV. SCIENCES (3 SH)</u>	
_____	_____ 3
SOCY 110 or 121 recommended	
One of the following: ANSC 101, APST 200, ECON 205, 206, GEOG 101, 102, 103 HIST 111, 112 POSC 120 PSYC 121 RELN 205 SOCY 110, 121	

A. National & International Perspectives

<u>U. S. PERSPECTIVES (3 SH)</u>	
_____	_____ 3
One of the following: APST 200 ECON 101, 205, 206, ENGL 203 GEOG 201, 202, 203 HIST 111, 112 POSC 120, SOCY 110	
<u>GLOBAL PERSPECTIVES (3SH)</u>	
_____	_____ 3
One of the following: CVPA 266, ENGL 201, 202 CCST 103, FORL 103 GEOG 101, 102, 140, 280 HIST 101, 102 INST 101 ITEC 112 PEAC 200 RELN 112, 205, SOCY 121, THEA 180, WMST 200	

B. Supporting Skills & Knowledge

<u>NATURAL SCIENCES OR MATH (4 SH)</u>	
PHYS 222	_____ 4
<u>HUMANITIES, VISUAL & PERFORMING ARTS, OR FOREIGN LANGUAGES (3-4 SH)</u>	
_____	_____ 3-4
One of the following: CLSS 110 CCST 110 ENGL 200 HIST 101, 102 PHIL 111, 112, 200; POSC 110; RELN 111, 112, 203, 206; CVPA 266; Or ART 100, 215, 216 DNCE 111, MUSC 100, 121, 123 THEA 100, 180 Or CHNS 101: 102, 201: 202 ARAB 101, 102, 201, 202, FORL 100, 109, 200, 210, 209, 309, 409; FREN 100, 200:210, 300, 320 GRMN 100, 200: 210, 300 LATN 101 102, 201, 350; RUSS 101, 102, 200, 210, 300; SPAN 101: 102, 105 201, 202	
<u>SOCIAL/ BEHAV. SCI. OR HEALTH & WELLNESS (3SH)</u>	
_____	_____ 3
One of the following: ANSC 101, APST 200 ECON 205, 206 GEOG 101, 102, 103 HIST 111, 112 POSC 120 PSYC 121 RELN 205 SOCY 110, 121 HLTH 111,200, NUTR 214 RCPT 200	

CSAT- Computer Science CONCENTRATION

(A grade of C or better must be earned in all courses with the ITEC Prefix)

ITEC 110	_____ (3)	Principles of Information Technology	F/S
ITEC 120	_____ (4)	Principles of Computer Science I	F/S
ITEC 122	_____ (3)	Discrete Mathematics	F/S
ITEC 220	_____ (4)	Principles of Computer Science II	F/S
ITEC 225	_____ (3)	Web Programming I	F/S
ITEC 345	_____ (3)	Introduction to Information Security	F/S
ITEC 490	_____ (1)	IT Professionalism	F/S
ITEC 324	_____ (3)	Principles of Computer Science III	F/S
MATH 171 or	_____ (4)	Calculus & Analytical Geometry I	F/S
MATH 168 AND	_____ (3)	Calculus I with Integrated Precalculus I	F/S
MATH 169	_____ (3)	Calculus I with Integrated Precalculus II	F/S
ITEC 320	_____ (3)	Procedural Analysis and Design	F/S
ITEC 352	_____ (3)	Computer Organization	F
ITEC 360	_____ (3)	Data Structures and Analysis of Algorithms	S
ITEC 370	_____ (3)	Software Engineering I	F/S
ITEC 371	_____ (3)	Operating Systems I	S
ITEC 380	_____ (3)	Organization of Programming Languages	F
ITEC 420	_____ (3)	Computability Theory & Formal Languages	F
MATH 172	_____ (4)	Calculus & Analytical Geometry III	F/S
STAT 301	_____ (3)	Probability and Statistics I	F/S
PHYS 221	_____ (4)	Physics	F
PHYS 222	_____ (4)	Physics	S
Any ONE of the following:	_____ (3-4)		
ITEC 340	_____ (3)	Database I	F/S
ITEC 350	_____ (3)	Intro to Computer Networking	F/S
ITEC 410	_____ (3)	Modeling and Simulation	S*
ITEC 430	_____ (3)	Computer Graphics	S*
ITEC 460	_____ (3)	Translator Design & Construction	S*
ITEC 480	_____ (3)	Artificial Intelligence	S*

Prerequisites

"C" or better in ITEC 109 or Math SAT \geq 550 or dept. test
"C" or better in ITEC 120 and MATH 125, 126, 138, 140 or 171
"C" or better ITEC 120
"C" or better ITEC 120
"C" or better ITEC 120
Senior Standing (86 hours or more)
"C" or better in ITEC 220
"C" or better in MATH 138, or college pre-calc \geq "C" or dept. test
"C" or better in MATH 168
"C" or better in ITEC 220
"C" or better in ITEC 220 & ITEC 122 Pre-req. or Co-req
ITEC 122/320/324
"C" or better in ITEC 220
ITEC 352
ITEC 324, 320
ITEC 122
"C" or better in either MATH 171 or MATH 169
MATH 172 "C" or better
MATH 171
PHYS 221
"C" or better in 220
"C" or better in 220
ITEC 320 and STAT 301
Pre-req. or Co-req. ITEC 360
ITEC 352 and ITEC 380
ITEC 122 and ITEC 324

* As demand and faculty availability allows.

Each student majoring in the computer science concentration of the Computer Science and Tech. degree must take the Major Field Test during his or her last semester.

B.S. Requirements 7-8 hrs.: Student concentrating in Computer Science must choose two courses totaling at least 7 hours from the following list: ASTR 111:112; any Biology (except BIOL 301:302); any Chemistry; any Geology any Physics (except PHYS 111:112 and PHYS 221:222 or PHYS 231); PHSC 301