

2019-2020 B.S Computer Science and Technology Computer Science Concentration

UNIVERSITY CORE

<u>A. Core Foundations</u>	<u>B. Core Skills & Knowledge</u>
CORE 101 _____ 3	MATHEMATICAL SCIENCES (3SH) MATH 171 _____ 3
CORE 102 _____ 3	NATURAL SCIENCES (4 SH) PHYS 221 _____ 4
HNRS 103 _____ 3	HUMANITIES (3 SH) One of the following: CLSS:110 CCST: 110 ENGL 200, HIST 101, 102 PHIL 111, 112, 200; POSC 110; RELN 111, 112, 203, 206
CORE 201 _____ 3 PHIL 111: 213	VISUAL & PERFORMING ARTS (3 SH) One of the following: ART 100, 215, 216 CVPA 266 DNCE 111 MUSC 100, 121, 123 THEA 100, 180
CORE 202 _____ 3 PHIL 112	SOCIAL/BEHAV. SCIENCES (3 SH) 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

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.

COLLEGE CORE

<u>A. National & International Perspectives</u>	<u>B. Supporting Skills & Knowledge</u>
U. S. PERSPECTIVES (3 SH) One of the following: APST 200 ECON 101, 205, 206, ENGL 203 GEOG 201, 202, 203 HIST 111, 112 POSC 120, SOCY 110	NATURAL SCIENCES OR MATH (4 SH) PHYS 222 _____ 4
GLOBAL PERSPECTIVES (3SH) 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	HUMANITIES, VISUAL & PERFORMING ARTS, OR FOREIGN LANGUAGES (3-4 SH) 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
	SOCIAL/ BEHAV. SCI. OR HEALTH & WELLNESS 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

Computer Science Concentration

			Term	Prerequisites
ITEC 110 _____ (3)	Principles of Information Technology	F/S		
ITEC 120 _____ (4)	Principles of Computer Science I	F/S		"C" or better in MATH 125 or MATH 138; or credit for MATH 126, MATH 168, or MATH 171; or permission of instructor.
ITEC 122 _____ (3)	Discrete Mathematics	F/S		"C" or better in ITEC 120 and MATH 125, 126, 138, 140 or 171
ITEC 220 _____ (4)	Principles of Computer Science II	F/S		"C" or better ITEC 120
ITEC 225 _____ (3)	Web Programming I	F/S		"C" or better ITEC 120
ITEC 345 _____ (3)	Introduction to Information Security	F/S		"C" or better ITEC 120
ITEC 490 _____ (1)	IT Professionalism	F/S		Senior Standing (86 hours or more)
ITEC 324 _____ (3)	Principles of Computer Science III	F/S		"C" or better in ITEC 220
MATH 171 or _____ (4)	Calculus & Analytical Geometry I	F/S		"C" or better in MATH 138, or college pre-calc \geq "C"
MATH 168 AND _____ (3)	Calculus I with Integrated Precalculus I	F/S		
MATH 169 _____ (3)	Calculus I with Integrated Precalculus II	F/S		"C" or better in MATH 168
ITEC 320 _____ (3)	Procedural Analysis and Design	F/S		"C" or better in ITEC 220
ITEC 352 _____ (3)	Computer Organization	F		"C" or better in ITEC 220 & ITEC 122 Pre-req. or Co-req
ITEC 360 _____ (3)	Data Structures and Analysis	S		ITEC 122/320/324
ITEC 370 _____ (3)	Software Engineering I	F/S		"C" or better in ITEC 220
ITEC 371 _____ (3)	Operating Systems I	S		ITEC 352
ITEC 380 _____ (3)	Organization of Programming Lang	F		ITEC 324, 320
ITEC 420 _____ (3)	Computability Theory & Formal Lang	F		ITEC 122
MATH 172 _____ (4)	Calculus & Analytical Geometry III	F/S		"C" or better in either MATH 171 or MATH 169
STAT 301 _____ (3)	Probability and Statistics I	F/S		MATH 172 "C" or better
PHYS 221 _____ (4)	Physics	F		MATH 171
PHYS 222 _____ (4)	Physics	S		PHYS 221
Any ONE of the following:				
ITEC 335 _____ (3)	Software Testing			ITEC 220 and ITEC 225 both with a grade of "C" or better
ITEC 340 _____ (3)	Database I	F/S		"C" or better in 220
ITEC 350 _____ (3)	Intro to Computer Networking	F/S		"C" or better in 220
ITEC 410 _____ (3)	Modeling and Simulation	S*		ITEC 320 and STAT 301
ITEC 430 _____ (3)	Computer Graphics	S*		Pre-req. or Co-req. ITEC 360
ITEC 460 _____ (3)	Translator Design & Construction	S*		ITEC 352 and ITEC 380
ITEC 480 _____ (3)	Artificial Intelligence	S*		ITEC 122 and ITEC 324

* As demand and faculty availability allows.

("C" or better must be earned in all courses with the ITEC Prefix)

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