

**2017-2018 B.S. Computer Science and Technology – Software Engineering Concentration**

**CORE CURRICULUM – 43-44 Semester Hours (SH)**

**UNIVERSITY CORE**

**COLLEGE CORE**

**A. Core Foundations**

CORE 101	_____	3
CORE 102	_____	3
HNRS 103	_____	3
CORE 201 COMS 114 PHIL 111: 213	_____	3
CORE 202 PHIL 112	_____	3

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

**B. Core Skills & Knowledge**

<b>MATHEMATICAL SCIENCES (3 SH)</b>	_____	3
MATH 151	_____	
<b>HUMANITIES (3 SH)</b>	_____	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		
<b>VISUAL &amp; PERFORMING ARTS (3 SH)</b>	_____	3
One of the following: ART 100, 215, 216 CVPA 266 DNCE 111 MUSC 100, 121, 123 THEA 100, 180		
<b>SOCIAL/BEHAV. SCIENCES (3 SH)</b>	_____	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**

<b>U. S. PERSPECTIVES (3 SH)</b>	_____	3
One of the following: APST 200 ECON 101, 205, 206, ENGL 203 GEOG 201, 202, 203 HIST 111, 112 POSC 120, SOCY 110		
<b>GLOBAL PERSPECTIVES (3 SH)</b>	_____	3
One of the following: CVPA 266, ENGL 201; CCST 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**

<b>NATURAL SCIENCES OR MATH (4 SH)</b>	_____	4
(Must select a 4-credit lab science)		
One of the following: ASTR 111, 112 BIOL 103, 104, 105 CHEM 101: 102, 120 GEOL 100, 105:106 PHYS 111: 112, 221:222		
<b>HUMANITIES, VISUAL &amp; PERFORMING ARTS, OR FOREIGN LANGUAGES (3-4 SH)</b>	_____	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 100, 200, 210, 300; SPAN 101: 102, 105 201, 202		
<b>SOCIAL/ BEHAV. SCI. OR HEALTH &amp; WELLNESS (3SH)</b>	_____	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 – Software Engineering Concentration**

**\* A grade of C or better is required for any course with an asterisk**

*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 324	_____ (3)	Principles of Computer Science III	F/S
*ITEC 345	_____ (3)	Introduction to Information Security	F/S
ITEC 490	_____ (1)	IT Professionalism	F/S
MATH 151	_____ (3)	Calculus & Analytical Geometry I	F/S
ITEC 320	_____ (3)	Procedural Analysis and Design	F/S
ITEC 335	_____ (3)	Software Testing	S
ITEC 370	_____ (3)	Software Engineering I	F/S
ITEC 380	_____ (3)	Organization of Programming Languages	F
ITEC 471	_____ (3)	Software Engineering II	F
ITEC 472	_____ (3)	Software Engineering III	S

**Prerequisites**

"C" or better in ITEC 109 or Math SAT ≥ 550 or dept. test
"C" or better in ITEC 120 and MATH 125, 126, 138, 140 or 151
"C" or better ITEC 120
"C" or better in ITEC 120
"C" or better in ITEC 220
"C" or better in ITEC 120
Senior Standing (86 hours or more)
Math SAT ≥ 550, or college pre-calc ≥ "C" or dept. test
"C" or better in ITEC 220
'C" or better in ITEC 220 and 225
"C" or better in ITEC 220
ITEC 324, ITEC 320
ITEC 320 324, 335 & 370
ITEC 471

ITEC\_\_\_\_\_ ( ), ITEC\_\_\_\_\_ ( ), ITEC\_\_\_\_\_ ( )

**Technical Electives** -Plus 9 Additional credit hours in 300 or 400 level ITEC course (except for ITEC 301, 304, 307, 381, 398, 493 or 498) or any 500/600 level ITEC course approved by the Department Chair.

**B.S. Requirements 6-8 hrs:** Any 200, 300 level or 400 level ITEC course (except ITEC 281, ITEC 301, 304, 307, 381, 398, and 498); any 500 or 600-level ITEC course approved by the Department Chair; MATH 152; any 200 level or above Math course; ASTR 111, ASTR 112, any Biology (except BIOL 301 and 302); any Chemistry; any Geology, GEOS 250 or ITEC 250, any Physics, or PHSC 301.

## Sample Schedule B.S. Computer Science Major – Software Engineering Concentration 17/18

Fall Semester		Spring Semester	
<b>Freshman Year</b>	<b>Cr.</b>	<b>Freshman Year</b>	<b>Cr.</b>
University Core A: Core 101	3	University Core A: Core 102	3
*ITEC 110	3	ITEC 122 ITEC 120"C" or better & MATH 126, 138, 140, 145, or 151	3
*ITEC 120 "C" or better in ITEC 109 or Math SAT $\geq$ 550 or dept. test	4	*ITEC 220 "C" or better ITEC 120	4
MATH 151 Math SAT $\geq$ 550, or college pre-calc $\geq$ "C"	3	CORE	3
UNIV 100	1	CORE	3
	<b>14</b>		<b>16</b>
Students with no programming experience are advised to take ITEC 109 their first semester. This course does not count towards major requirements, but will count towards the 120 credit hours needed to graduate. * Students must receive a grade of "C" or better in courses marked with an asterisk *			
<b>Sophomore Year</b>	<b>Cr.</b>	<b>Sophomore Year</b>	<b>Cr.</b>
University Core A: Core 201	3	University Core A: Core 202	3
*ITEC 225 ITEC 120 "C" or better	3	ITEC 320 "C" or better in ITEC 220	3
ITEC 324 "C" or better in both ITEC 110/220	3	ITEC 370 "C" or better in ITEC 220	3
CORE Natural Science	4	CORE Natural Science	4
*ITEC 345 "C" or better in ITEC 120	3	FREE ELECTIVE to reach 120 credit hours	3
	<b>16</b>		<b>16</b>
CORE 101, 102, 201, and 202 must be completed in succession. Students should complete CORE 202 prior to their junior year.			
<b>Junior Year</b>	<b>Cr.</b>	<b>Junior Year</b>	<b>Cr.</b>
ITEC 3/4XX elective for major (see below)	3	ITEC 3/4XX elective for major (see below)	3
ITEC 471 (F ONLY) ITEC 324, ITEC 320, ITEC 370	3	ITEC 472 (S ONLY) ITEC 471	3
CORE	3	CORE	3
FREE ELECTIVE to reach 120 credit hours	3	CORE	3
	3	ITEC 335 (S ONLY) ITEC 110, 220 & 225 C or better in all	3
	<b>15</b>		<b>15</b>
<b>Senior Year</b>	<b>Cr.</b>	<b>Senior Year</b>	<b>Cr.</b>
ITEC 380 (F ONLY) ITEC 324, ITEC 320	3	ITEC 3/4XX elective for major (see below)	3
B.S. requirement (see below)	3	B.S. requirement (see below)	4
ITEC 490 senior standing	1	FREE ELECTIVE to reach 120 credit hours	3
FREE ELECTIVE to reach 120 credit hours	3	FREE ELECTIVE to reach 120 credit hours	3
CORE	3		
CORE	<b>16</b>		<b>13</b>

**Technical Electives** -Plus 9 Additional credit hours in 300 or 400 level ITEC course (except for ITEC 301, 304, 307, 381, 398, 493 or 498) or any 500/600 level ITEC course approved by the Department Chair.

B.S. requirements 6-8 hrs: Any 200-level or above ITEC course (except for ITEC 281, 301, 304,307, 381, 398 or 498); any 500 or 600-level course approved by the department chair, MATH 152; any 200-level or above MATH course; ASTR 111 , ASTR 112 , any Biology (except BIOL 301 and BIOL 302 ); any Chemistry; any Geology, GEOS 250, or ITEC 250 any Physics, or PHSC 301.

