

2015-2016 B.S Computer Science and Technology – Networks Concentration

NAME _____

ID# _____

A. Core Foundations

CORE 101 _____ 3
 CORE 102 _____ 3
 HNRS 103* _____ 3
 CORE 201 _____ 3
 CORE 202 _____ 3

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

Students can use only one course with their major prefix to fulfill core requirements.

* Honors course – will meet CORE 101 & 102 for those students in the RU honors program

B. Core Skills & Knowledge

Courses must be from different disciplines:

MATHEMATICAL SCIENCES (3 SH)
 MATH 151 _____ 3

NATURAL SCIENCES (4 SH)
 _____ 4

One of the following: ASTR 111, 112
 BIOL 103, 104, 105 CHEM 101: 102, 120
 GEOL 100, 105: 106 PHYS 111: 112, 221: 222

HUMANITIES (3 SH)
 _____ 3

One of the following: CLSS 110 CCST 110
 ENGL 200 HIST 101, 102 PHIL 111, 112, 114; POSC 110; RELN 111, 112, 203, 206

VISUAL & PERFORMING ARTS (3 SH)
 _____ 3

One of the following: ART 100, 215, 216
 CVPA 266, DNCE 111 MUSC 100, 121, 123
 THEA 100, 180

SOCIAL/BEHAV. SCIENCES (3 SH)
 _____ 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

A. National & International Perspectives

Courses must be from different disciplines:

U. S. PERSPECTIVES (3 SH)

_____ 3
 One of the following: APST 200
 ECON 101, 205, 206, ENGL 203
 GEOG 201, 202, 203 HIST 111, 112
 POSC 120, SOCY 110

GLOBAL PERSPECTIVES (3 SH)

_____ 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 101

B. Supporting Skills & Knowledge

NATURAL SCIENCES OR MATH (3/4 SH)
 (Must select a 4-credit lab science)

_____ 4
 From one of the following: ASTR 111, 112
 BIOL 103, 104, 105 CHEM 101: 102, 120
 GEOL 100, 105:106 PHYS 111: 112, 221:222

HUMANITIES, VISUAL & PERFORMING ARTS, OR FOREIGN LANGUAGES (3-4 SH)

_____ 3-4
 One of the following: CLSS 110 CCST 110 ENGL 200
 HIST 101, 102 PHIL 111, 112, 114; POSC 110;
 RELN 111, 112, 203, 206 Or ART 111, 215, 216;
 CVPA 266; DNCE 111 MUSC 100, 121, 123
 THEA 100, 180 Or CHNS 101: 102, 201: 202
 ARAB 101, 102,201,202,300,303 FORL 100, 200
 209, 210, 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, 103, 201, 202

SOCIAL/ BEHAV. SCI. OR HEALTH & WELLNESS (3 SH)

_____ 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 – Networks Concentration * A grade of C or better is required for any course with an asterisk

Networks CONCENTRATION

*ITEC 110 _____ (3)	Principles of Information Technology	F/S
*ITEC 120 _____ (4)	Principles of Computer Science I	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
MATH 151 _____ (3)	Calculus & Analytical Geometry I	F/S
MATH 152 _____ (3)	Calculus & Analytic Geometry II	F/S
STAT 200/301 _____ (3)	Statistics	F/S
ITEC 122 _____ (3)	Discrete Mathematics	F/S
ITEC 324 _____ (3)	Principles of Computer Science III	F/S
ITEC 310 _____ (3)	Programming in C and Unix	F/S
ITEC 340 _____ (3)	Database I	F/S
ITEC 350 _____ (3)	Introduction to Computer Networking	F/S
ITEC 352 _____ (3)	Computer Organization	F
ITEC 371 _____ (3)	Operating Systems I	S
ITEC 451 _____ (3)	Network Design and Analysis	S
ITEC 452 _____ (3)	Distributed Computing	F

Prerequisites

"C" or better in ITEC 120
"C" or better in either ITEC 109 or ITEC 120
"C" or better in ITEC 120
Senior Standing
Math SAT ≥ 550, or college pre-calc ≥ "C"
"C" or better in MATH 151
"C" or better in ITEC 120 and MATH 125, 126, 138, 140 or 151
"C" or better in both ITEC 110/220
"C" or better in both ITEC 110/220
"C" or better in both ITEC 110/220
"C" or better in both ITEC 110/220
ITEC 220 "C" or better & ITEC 122
ITEC 352
ITEC 122/350, MATH 152 & STAT 200/300
ITEC 310/350/371

Plus 6 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.

ITEC _____ (3) ITEC _____ (3)

See back for B.S. Requirements

Sample Schedule B.S. Computer Science Major – Networks Concentration 15/16

Fall Semester		Spring Semester	
Freshman Year	Cr.	Freshman Year	Cr.
University Core A: Core 101	3	University Core A: Core 102	3
*ITEC 110	3	*ITEC 220 "C" or better ITEC 120	4
*ITEC 120	4	ITEC 122 ITEC 120 "C" or better & MATH 126 or higher	3
MATH 151 Math SAT \geq 550, or college pre-calc \geq "C"	3	MATH 152 MATH 151 "C" or better	3
UNIV 100	1	CORE	3
	14		16
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 *			
Sophomore Year	Cr.	Sophomore Year	Cr.
University Core A: Core 201	3	University Core A: Core 202	3
ITEC 324 "C" or better in both ITEC 110/220	3	ITEC 310 "C" or better in both ITEC 110/220	3
*ITEC 225 "C" or better in either ITEC 109 or ITEC 120	3	ITEC 350 "C" or better in both ITEC 110/220	3
CORE natural science	4	CORE natural science	4
*ITEC 345 "C" or better in ITEC 120	3	CORE	3
	16		16
CORE 101, 102, 201, and 202 must be completed in succession. Students should complete CORE 202 prior to their junior year			
Junior Year	Cr.	Junior Year	Cr.
ITEC 352 (F ONLY) ITEC 122 and ITEC 220 "C" or better	3	ITEC 371 (S ONLY) ITEC 352	3
ITEC 340 "C" or better in both ITEC 110/220	3	ITEC 451 (S ONLY) ITEC 122, 350, MATH 152 and STAT 200 or STAT 301	3
STAT STAT 200 or 301	3	ITEC 3/4xx elective for major	3
CORE	3	CORE	3
FREE ELECTIVE to reach 120 credit hours	3	FREE ELECTIVE to reach 120 credit hours	3
	15		15
Senior Year	Cr.	Senior Year	Cr.
ITEC 452 (F ONLY) ITEC 310, 350, and 371	3	ITEC 3/4xx elective for major	3
B.S. requirement (see below)	3	B.S. requirement (see below)	3
ITEC 490 Senior Standing	1	CORE	3
CORE	3	FREE ELECTIVE to reach 120 credit hours	3
CORE	3	FREE ELECTIVE to reach 120 credit hours	3
	13		15

B.S. requirements 6-8 hrs: Any 300-level or above ITEC course (except for ITEC 301, 304, 307, 381, 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 (except GEOL 110 and 205), any Physics, or PHSC 301 .