

2013-2014 B.S Computer Science and Technology – Database Concentration

CORE CURRICULUM – 43-44 Semester Hours (SH)

UNIVERSITY CORE

A. Core Foundations

CORE 101	_____	3
CORE 102	_____	3
CORE 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 replace 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: 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 111, 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 105, 106 GEOG 101, 102, 103
HIST 111, 112 POSC 120 PSYC 121 RELN
205 SOCY 110, 121

COLLEGE CORE

A. National & International

Perspectives Courses must be from different disciplines:

U. S. PERSPECTIVES (3 SH)

One of the following: APST 200
ECON 101, 105, 106, 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, FORL 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 SCI. OR MATHEMATICAL SCIENCES (3/4 SH)

(Must select a 4-credit lab science)
_____ _____ _____ 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, VISUAL & PERFORMING ARTS, OR FOREIGN LANGUAGES (3-4 SH)
_____ _____ _____ 3-4

One of the following: 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 FORL 100, 109,
200, 209, 210 309, 409,: FREN 100, 200:210,
300, 320 GRMN 100, 200: 210, 300 LATN 101.
201, 350, RUSS 100, 200, 210, 300; SPAN 101:
102, 201, 202

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

One of the following: ANSC 101, APST 200
ECON 105, 106 GEOG 101, 102, 103 HIST 111,
112 POSC 120 PSYC 121 RELN 205 SOCY 110,
121 HLTH 111,200 NURS 111 NUTR 214
RCPT 200

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

Database CONCENTRATION

*ITEC 110	_____ (3)	Principles of Information Technology
*ITEC 120	_____ (4)	Principles of Computer Science I
*ITEC 220	_____ (4)	Principles of Computer Science II
*ITEC 225	_____ (3)	Web Programming I
*ITEC 345	_____ (3)	Introduction to Information Security
ITEC 490	_____ (1)	IT Professionalism
MATH 151	_____ (3)	Calculus & Analytical Geometry I
ITEC 122	_____ (3)	Discrete Mathematics
ITEC 324	_____ (3)	Principles of Computer Science III
ITEC 320	_____ (3)	Procedural Analysis and Design
ITEC 325	_____ (3)	Web Programming II
ITEC 340	_____ (3)	Database I
ITEC 441	_____ (3)	Database II
ITEC 442	_____ (3)	Data Warehousing, Mining, & Reporting

Prerequisites

F/S	
F/S	
F/S	"C" or better ITEC 120
F/S	"C" or better in either ITEC 109 or ITEC 120
F/S	"C" or better ITEC 120
F/S	Senior Standing (86 hours or more)
F/S	Math SAT ≥ 550, or college pre-calc ≥ "C"
F/S	ITEC 120 "C" or better & MATH 125 or higher
F/S	"C" or better in both ITEC 110/220
F/S	"C" or better in both ITEC 110/220
F/S	ITEC 225 "C" or better, & ITEC 340
F/S	"C" or better in both ITEC 110/220
S	ITEC 340
F	ITEC 340

Technical Electives - 12 Additional credit hours in 300 or 400 level ITEC course (except ITEC 301, 304, 400, 493, and 498)

ITEC _____ (), ITEC _____ (), ITEC _____ (), ITEC _____ ()

Sample Schedule B.S. Computer Science Major – Database Concentration 13/14

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 122 "C" or better ITEC 120 & MATH 126, 138, 140, 145, or 151	3
*ITEC 120	4	*ITEC 220 "C" or better ITEC 120	4
MATH 151 Math SAT \geq 550, or college pre-calc \geq "C"	3	CORE	3
CORE	3	CORE	3
UNIV 100	1		
	17		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 320 "C" or better in both ITEC 110/220	3
*ITEC 225 "C" or better in either ITEC 109 or ITEC 120	3	ITEC 340 "C" or better in both ITEC 110/220	3
CORE Natural Science	4	CORE Natural Science	4
ITEC 345 "C" or better ITEC 120	3	FREE ELECTIVE to reach 120 credit hours	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 3/4xx elective for major (except ITEC 301, 400, 493 and 498)	3	ITEC 3/4xx elective for major (except ITEC 301, 400, 493 and 498)	3
ITEC 442 (F ONLY) ITEC 340	3	ITEC 441 (S ONLY) ITEC 340	3
ITEC 325 ITEC 225 "C" or better & ITEC 340	3	CORE	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 3/4xx elective for major (except ITEC 301, 400, 493 and 498)	3	ITEC 3/4xx elective for major (except ITEC 301, 400, 493 and 498)	3
B.S. requirement (see below)	3	B.S. requirement (see below)	3
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		
	13		12

B.S. Requirements 6-8 hrs: Any 300 level or above ITEC course (except ITEC 301, 304, and ITEC 400); MATH 152; any 200 level or above Math course; ASTR 111, ASTR 112, any Biology (except BIOL 301 and 302); any Chemistry; any Geology (except GEOL 110 and 205), any Physics, or PHSC 301.