

COLLEGE OF LIBERAL ARTS & SCIENCES • BS/MS • COMPUTER SCIENCE: SOFTWARE DEVELOPMENT

Program Code: ULASCSCMS Version Number: 2118 - Fall 2011

Effective Date: August 29, 2011

GENERAL EDUCATION

I. UNIVERSITY CORE (12 credits)	RC	CR	GR		III. COMPETENCIES ACROSS THE CURRICULUM	RC	CR	GR	CAC
A. Oral Communication: COM 10 or above					A.Writing Intensive (WI) (9 credits)	1			
COURSE:	3				COURSE:	3			WI
B.Written Communication: ENG 23, 24, or 25				_	COURSE:	3			WI
COURSE:	3			1	COURSE:	3			WI
C.Mathematics: MAT 17 or above				_	B. Quantitative Literacy (QL) (3 credits) Computer-Intensive (CP) (3 credits)		1	ı	ı
COURSE: MAT 140 or 301	3				COURSE:	3			
D.Wellness: Any 3-credit HEA course					C.Visual Literacy (VL) (3 credits)	-			
COURSE:	3				Communication-Intensive (CM) (3 credits)				
		1		- '	COURSE:	3			
II. UNIVERSITY DISTRIBUTION (15 credits)	RC	CR	GR	CAC	D.Cultural Diversity (CD) (3 credits)				
A. Natural Sciences: Any lab or non-lab course with prefix AST, BIO, CHM, ENV, GEL, MAR, NSE, or PHY; or certain GEG					COURSE:	3			CD
courses (see note at right)		1		1 1	E. Critical Thinking (CT) (3 credits)				
COURSE:	3				COURSE:	3			СТ
B. Social Sciences: Any course with prefix ANT, CRJ, ECO, HIS, INT, MCS, PSY, POL, SOC, SSE, or SWK; or certain GEG courses (see note at right)					A Competency Across the Curriculum (CAC) course is r rather an overlay that is "double counted" as fulfilling bot				
COURSE:	3				another requirement in either General Education (exception the major, or the minor.				
C.Humanities: Any course with prefix ENG, HUM, PAG, PHI, WRI, WGS, or Modern Language		•		•	• •				
COURSE:	3				RC = Minimum required number of credits CR = Credits earned (fill in number of credits)				
D.Arts: Any course with prefix ARC, ARH, ART, CDE, CDH, CFT, DAN, FAR, FAS, MUP, MUS, or THE		•	•	•	GR = Grade earned (fill in letter grade) CAC = Competency Across the Curriculum (fill in desig	nation)			
COURSE:	3				NATE 050			_	
E. Free Elective: Any course carrying university credit					NOTE: GEG courses with a lab and 40, 322, and 323 n in II.A. and GEG courses 40, 204, 274, 304, 322, 323, 3	,			
COURSE:	3				380, and 394 may NOT be used in II.B.				
IV COLLECE DISTRIBUTION (22 credite)	RC	CR		CAC					
IV. COLLEGE DISTRIBUTION (33 credits) A. Natural Science, Mathematics, and	 	CR	GR	CAC		RC	CR	GR	CAC
Computer Science [#] (6 credits): Choose one course in each subcategory.					C. Humanities (9 credits): Choose one course in each subcategory.			•	0,10
Natural Science with Lab: AST, BIO, CHM, ENV, GEL, PHY, or MAR; or GEG (see note at right)					1. Elective: PAG*, ENG, WRI, or HUM	1	1		1
COURSE:	3				COURSE: WRI205WI OR WRI207WICT	3			
2. Elective: MAT, CSC, AST, BIO, CHM, ENV, GEL, PHY, or		1	<u> </u>	1	2. Elective: Modern Language (103 or above) or PHI				
MAR; or GEG (see note at right)	<u> </u>	1	1		COURSE: PHI 40 CDCT	3			
COURSE:	3				3. Elective: PAG*, ENG, WRI, HUM, Modern Language				
B. Social Science (9 credits): Choose one course in	İ				(103 or above), or PHI	+	1	1	1

NOTE: GEG courses with a lab and 40, 322, and 323 may be used in IV.A. and GEG courses 40, 204, 274, 304, 322, 323, 324, 347, 380, and 394 may NOT be used in IV.B.

D. Free Electives (9 credits): Choose any university

courses that count toward graduation

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COURSE:

COURSE:

COURSE:

COURSE:

POL, SOC, CRJ, or SWK

each subcategory.

COURSE:

COURSE:

COURSE:

1. Elective: HIS, ANT, GEG (see note at right), or POL

3. Elective: ANT, HIS, ECO, GEG (see note at right), PSY,

2. Elective: PSY, SOC, CRJ, or SWK

[#] Students in the College of Liberal Arts and Sciences are required to take at least one course in Biological Science (BIO) and at least one course in Physical Science (AST, CHM, ENV, GEL, PHY, MAR, GEG with lab, or GEG 322, or GEG 323), and at least one of which must be a lab (each course may be counted in either sections II.A or IV A)

^{*} Excludes PAG 011 and PAG 012

BS Computer Science: Software Development (60CR)

Program Code: ULASCSCMS Version Number: 2162 - Spring 2016 Effective Date: January 19, 2016

Major Program: 51 credits				
1. Required Courses: 33 credits	CR	GR		
CSC 125: Discrete Math for CS I				
CSC 225: Discrete Math for CS II				
CSC 135: Comp Sci I				
CSC 136: Comp Sci II				
CSC 235: Comp Org & Asm. Lng.				
CSC 237: Data Structures				
CSC 310: Prog. Languages				
CSC 328: Network Programming				
CSC 343: Operating Systems				
CSC 354: Software Engineering I				
CSC 355: Software Engineering II				

Concomitant Courses: 9 credits			
1. Required Courses: 9 credits	CR	GR	
MAT 181: Calculus I			
MAT 260: Linear Algebra			
MAT (elective higher than 181, not 224)			
MAT 140 or 301: Applied Stat Methods*	X	X	
WRI 205: Scientific Writing*	X	X	
PHI 040: Intro to Ethics*	X	X	
*accounted for in general education			
2. Internship – optional (Gen Ed free elective)		GR	
CSC 280: Cooperative Internship I			
CSC 380: Cooperative Internship II			

2. CS Elective Courses: 18 credits	CR	GR
a. CS Elective Courses: 0-6 credits of additional 200-level CSC courses, not previously used for above requirements.		
b. CS Elective Courses: 12-18 credits of additional CSC courses, number 300 or above and not previously used for above requirements.		

Notes

Students minoring in Math should take MAT 301 (not MAT140).

Before taking any 300-level course a student must have completed 18 credit hours in CSC courses numbered 125 or above with a GPA of 2.25 in the CSC courses.

CSC-prefix courses below 125-level, CSC 130, CSC 280 and CSC 380 do not count toward the major requirements for a BS in Computer Science/Software Development (they can count in general education).

Internal Transfer: 2.25 GPA required	
Graduation Requirement: 2.25 GPA Major	

Degree Requirements		
1. Semester Hours (Total: 120)	Req	Earned
a. General Education	60	
b. Major Program	51	
c. Concomitant Courses	9	
2. GPA		
a. Overall	2.0	
b. Major	2.25	·
3. Passed Comprehensive Exam	Semester	:

Five-Year Combined BS/MS in CSC Program

120 credits	BS in Computer Science:Software Development – Five Year BS/MS Undergraduate Program
30 credits	MS in Computer Science: Software Development
– 12 credits	Additional 12 credits of 400-level CSC courses counted toward the 120 credits for the BS above the 51 credit limit for the undergraduate degree counted for the MS
138 credits	Total credits needed to receive both the BS and MS in Computer Science:Software Development

BS in CSC is awarded 120 undergraduate credits; B average or higher in CSC courses required for admission to Graduate School.

Undergraduate admission to the BS/MS Program in CS: Junior status (60 or more credits overall) and at least 24 CSC course credits with 3.00 GPA or higher and a B or better in CSC 125, 126, 235, 237, and 310 each

Degree Requirements for the Master of Science in Computer Science:Software Development track

- 1. Candidates for the MS degree in Computer Science must complete a total of 30 credits. A candidate must complete all degree requirements within six calendar years after his or her acceptance to the program.
- 2. Students must select either the thesis option or the comprehensive exam option. The thesis option requires the completion of 24 credits of courses and 6 credits of thesis. The comprehensive exam option requires the completion of 30 credits of courses and passing the comprehensive exams. Comprehensive exams are given the last week of class in the Fall and Spring semesters.
- 3. Students must complete at least 18 credits of 500-level courses.
- 4. Students must complete at least one depth component in their program. Depth components require the student to choose at least two courses (including one 500-level) from at least one depth area.

Depth Area	Courses
Compiler	425, 526
AI	445, 447, 548
Database	456, 556
Web	421, 464, 521
OO/Functional Design and Devel.	520, 543
Operating Systems	543, 552
Modular Design & Development	520, 540,543

Required: 3 credits		Date
CSC 402: Data Structures II		
Foundational Courses: 15-27 credits		
CSC 421: Web-Based Design and Develop		
CSC 425: Compiler Design I		
CSC 456: Database I		
CSC 516: Design & Analysis of Algor II		
CSC 520: Adv Object Oriented Program		
CSC 521: Advanced Web-Based Soft. Devel		
CSC 526: Compiler Design II		
CSC 543: Multiprocessing & Concurrent Prg		
CSC 552: Advanced UNIX Programming		
CSC 556: Database II		
Optional Thesis: 0 or 6 credits		
CSC 599: Thesis – 6 credits		

Elective Courses: 0-6 sh	CR	Date
CSC 411: Networking I		
CSC 441: Advanced Information Security		
CSC 445: Intro to Intelligent Robotics		
CSC 447: Artificial Intelligence I		
CSC 464: Human Computer Interaction		
CSC 480: Special Topics		
CSC 512: Networking II		
CSC 540: Engineering Enterprise OO Sys		
CSC 548: Artificial Intelligence II		
CSC 554: Project Management		
CSC 555: Applied Cryptography		
CSC 580: Special Topics		
Program Code: GLASCSCBS		

Version Number: 2158

Effective Date: August 24, 2015