## **BS Computer Science:Software Development (60CR)**

Program Code: ULASCSCSD Version Number: 2118 - Fall 2011 Effective Date: August 29, 2011

Program Code: ULASCSCSD	Versio	n Numl
B. 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 325: Intro to CS Theory		
CSC 343: Operating Systems		
CSC 354: Software Engineering		
CSC 385: Seminar in CSC		
Elective Courses: 18 credits (no more than two 200-level)	CR	GR
CSC 241: Adv Visual Basic		
CSC 242: Web Programming		
CSC 243: Java Programming		
CSC 253: IT Systems		
CSC 311: Computer Networks		
CSC 320: Intro to Game Programming		
CSC 341: Information Security		
CSC 342: Web Technologies		
CSC 351: Digital Forensics		
CSC 352: UNIX: Sys Prog/Adm		
CSC 356: Introduction to Database Sys		
CSC 402: Data Structures II		
CSC 411: Advanced Networking		
CSC 421: Web-Based Soft Design & Dev	7	
CSC 425: Compiler Design I		
CSC 445: Intro to Intelligent Robotics		
CSC 447: Artificial Intelligence I		
CSC 456: Database Mgm Sys I		
CSC 464: Human Computer Interaction		
CSC 480: Special Topics		

C. 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 (free elective)	CR	GR			
CSC 280: Cooperative Internship I	3-6				
CSC 380: Cooperative Internship II	3-6				
Notes					
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.					
Students minoring in Math should take MAT 301					
CSC-prefix courses below 125-level, CSC 130, CSC 280 and CSC 380 do not count toward the BS in Computer Science.					

Internal Transfer: 2.25 GPA needed

Graduation requirement: 2.25 GPA Overall, 2.25 GPA

Major



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

Program Number: ULASCSCSD Version Number: 2118 - Fall 2011 Effective Date: August 29, 2011

## **GENERAL EDUCATION**

. UNIVERSITY CORE (12 credits)	RC	CR	GR		III. COMPETENCIES ACROSS THE CURRICULUM		CR	GR	CAC
A. Oral Communication: COM 10 or above					A. Writing Intensive (WI) (9 credits)				
COURSE:	3				COURSE:	3			WI
B. Written Communication: ENG 23, 24, or 25				_'	COURSE:	3			WI
COURSE:	3				COURSE:	3			WI
C.Mathematics: MAT 17 or above				_'	B. Quantitative Literacy (QL) (3 credits)				
COURSE: MAT 140 or 301	3				Computer-Intensive (CP) (3 credits)			1	
D.Wellness: Any 3-credit HEA course				_	COURSE:	3			
COURSE:	3				C.Visual Literacy (VL) (3 credits) Communication-Intensive (CM) (3 credits)				
		ı		_	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 courses (see note at right)					COURSE:	3			CD
COURSE:	3				E. Critical Thinking (CT) (3 credits)		1		
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)					COURSE:  A Competency Across the Curriculum (CAC) course is rather an overlay that is "double counted" as fulfilling by				
COURSE:	3				another requirement in either General Education (exce				
C.Humanities: Any course with prefix ENG, HUM, PAG, PHI, WRI, WGS, or Modern Language		I			the major, or the minor.				
COURSE: WRI 205	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 desi	gnation	)		
COURSE:	3							_	
					<b>NOTE:</b> GEG courses with a lab and 40, 322, and 323 in II.A. and GEG courses 40, 204, 274, 304, 322, 323,				
E. Free Elective: Any course carrying university credit							+/,		

IV. COLLEGE DISTRIBUTION (33 credits)	RC	CR	GR	CAC
A. Natural Science, Mathematics, and Computer Science# (6 credits): Choose one course in each subcategory.				
Natural Science with Lab: AST, BIO, CHM, ENV, GEL, PHY, or MAR; or GEG (see note at right)				
COURSE:	3			
Elective: MAT, CSC, AST, BIO, CHM, ENV, GEL, PHY, or MAR; or GEG (see note at right)				
COURSE:	3			
B. Social Science (9 credits): Choose one course in each subcategory.				
1. Elective: HIS, ANT, GEG (see note at right), or POL				
COURSE:	3			
2. Elective: PSY, SOC, CRJ, or SWK				
COURSE:	3			
3. Elective: ANT, HIS, ECO, GEG (see note at right), PSY, POL, SOC, CRJ, or SWK				
COURSE:	3			

	RC	CR	GR	CAC
C. Humanities (9 credits): Choose one course in each subcategory.				
1. Elective: PAG*, ENG, WRI, or HUM				
COURSE:	3			
2. Elective: Modern Language (103 or above) or PHI				
COURSE: PHI 40 CDCT	3			
3. Elective: PAG*, ENG, WRI, HUM, Modern Language (103 or above), or PHI				
COURSE:	3			
D. Free Electives (9 credits): Choose any university courses that count toward graduation.				
COURSE:	3			
COURSE:	3			
COURSE:	3			

**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.

<sup>#</sup> 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 40, 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)

<sup>\*</sup> Excludes PAG 011 and PAG 012