

BS/MS Computer Science: Software Development (60 CR)

Program Code: ULASCSCSD

Version Number: 2118 - Fall 2011

Effective Date: August 29, 2011

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		
2. 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		
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 171: Calculus I		
MAT 260: Linear Algebra		
MAT (elective higher than 171, 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

Five-Year Combined BS/MS in CS 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 CS is awarded after the completion of 120 undergraduate credits; B-average or higher in CSC courses required for admission to Graduate School.	Program Code: ULASCSCMS
	Version Number: 2098 - Fall 2009
	Effective Date: August 31, 2009
Undergraduate admission to the Combined BS/MS Program in Computer Science: Junior status (60 or more credits taken overall) and at least 24 computer science CSC course credits with 3.00 GPA or higher and a B or better in CSC 125, 126, 235, 237, and 310 each	

MS in Computer Science:Software Development (30 CR)

Comprehensive Examination Required for Those Not Writing a Thesis

400-level courses: 0 – 12 credits	CR	GR	500-level courses: 18 – 30 credits	CR	GR
CSC 402: Data Structures II			CSC 510: Advanced Operating Systems		
CSC 411: Advanced Networking			CSC 512: Network Architecture & Protocols		
CSC 421: Web-Based Design and Develop			CSC 516: Design & Analysis of Algors II		
CSC 425: Compiler Design I			CSC 520: Advanced Object Oriented Program		
CSC 447: Artificial Intelligence I			CSC 521: Advanced Web-Based Soft. Devel		
CSC 456: Database I			CSC 526: Compiler Design II		
CSC 464: Human Computer Interaction			CSC 541: Advanced Information Security		
CSC 480: Special Topics			CSC 548: Artificial Intelligence II		
CSC 554: Project Management			CSC 552: Advanced UNIX Programming		
			CSC 555: Applied Cryptography		
			CSC 557: Database II		
			CSC 580: Special Topics		
			CSC 599: Thesis – 6 credits		

Notes on the Five-Year Combined BS/MS in Computer Science:Software Development

400-level courses included on the undergraduate transcript only count here toward the masters degree if they exceed the 51 credits needed for the undergraduate degree. Internship credits are excluded from this count.

Up to 9 credits of 500-level courses may be taken during the senior year for the BS in Computer Science:Software Development. However none of those credits count toward the 120 credits needed for the BS in Computer Science:Software Development. They only count toward the MS in Computer Science:Software Development.

STUDENT:



STUDENT ID NUMBER:

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

Program Code: ULASCSCSD

Version Number: 2118 - Fall 2011

Effective Date: August 29, 2011

GENERAL EDUCATION
I. UNIVERSITY CORE (12 credits)

	RC	CR	GR
A. Oral Communication: COM 10 or above			
COURSE:	3		
B. Written Communication: ENG 23, 24, or 25			
COURSE:	3		
C. Mathematics: MAT 17 or above			
COURSE: MAT 140 or 301	3		
D. Wellness: Any 3-credit HEA course			
COURSE:	3		

II. UNIVERSITY DISTRIBUTION (15 credits)

	RC	CR	GR	CAC
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			
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:	3			
C. Humanities: Any course with prefix ENG, HUM, PAG, PHI, WRI, WGS, or Modern Language				
COURSE: WRI 205	3			
D. Arts: Any course with prefix ARC, ARH, ART, CDE, CDH, CFT, DAN, FAR, FAS, MUP, MUS, or THE				
COURSE:	3			
E. Free Elective: Any course carrying university credit				
COURSE:	3			

III. COMPETENCIES ACROSS THE CURRICULUM

	RC	CR	GR	CAC
A. Writing Intensive (WI) (9 credits)				
COURSE:	3			WI
COURSE:	3			WI
COURSE:	3			WI
B. Quantitative Literacy (QL) (3 credits) 011				
Computer-Intensive (CP) (3 credits)				
COURSE:	3			
C. Visual Literacy (VL) (3 credits) 011				
Communication-Intensive (CM) (3 credits)				
COURSE:	3			
D. Cultural Diversity (CD) (3 credits)				
COURSE:	3			CD
E. Critical Thinking (CT) (3 credits)				
COURSE:	3			CT

A Competency Across the Curriculum (CAC) course is not a separate course, but rather an overlay that is "double counted" as fulfilling both the CAC requirement and another requirement in either General Education (except for the University Core), the major, or the minor.

RC = Minimum required number of credits

CR = Credits earned (fill in number of credits)

GR = Grade earned (fill in letter grade)

CAC = Competency Across the Curriculum (fill in designation)

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

IV. COLLEGE DISTRIBUTION (33 credits)

	RC	CR	GR	CAC
A. Natural Science, Mathematics, and Computer Science[#] (6 credits): Choose one course in each subcategory.				
1. Natural Science with Lab: AST, BIO, CHM, ENV, GEL, PHY, or MAR; or GEG (see note at right)				
COURSE:	3			
2. 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.

[#] 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.).

* Excludes PAG 011 and PAG 012