

COLLEGE OF LIBERAL ARTS & SCIENCES • BS/MS • COMPUTER SCIENCE: INFORMATION TECHNOLOGY

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

GENERAL EDUCATION

| . 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) | | | | |
| 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 | | | ı | _ | B. Quantitative Literacy (QL) (3 credits) OR | | | | |
| COURSE: MAT 140 | 3 | | | | Computer-Intensive (CP) (3 credits) | | | | |
| D.Wellness: Any 3-credit HEA course | | | I | 1 | COURSE: C.Visual Literacy (VL) (3 credits) OR | 3 | | | |
| COURSE: | 3 | | | 1 | C. Visual Elleracy (VL) (3 credits) OR Communication-Intensive (CM) (3 credits) | | | | |
| - | | | | _1 | COURSE: | 3 | | | |
| I. 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 | | | 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 no rather an overlay that is "double counted" as fulfilling both | | | | |
| COURSE: | 3 | | | | another requirement in either General Education (except for the University | | | | |
| C.Humanities: Any course with prefix ENG, HUM, PAG, PHI, WRI, WGS, or Modern Language | | | | | the major, or the minor. RC = Minimum required number of credits | | | | |
| COURSE: | 3 | | | | 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 design | ation) | | | |
| COURSE: | 3 | | | | [| | | _ | |
| E. Free Elective: Any course carrying university credit | | | | | NOTE: GEG courses with a lab and 40, 322, and 323 m in II.A. and GEG courses 40, 204, 274, 304, 322, 323, 33 | | | | |
| COURSE: | 3 | | | | 380, and 394 may NOT be used in II.B. | | | | |
| V. COLLEGE DISTRIBUTION (33 credits) | RC | CR | GR | CAC | | | | | |
| A. Natural Science, Mathematics, and | | | | | | RC | CR | GR | CAC |
| Computer Science# (6 credits): Choose one course in each subcategory. | | | | | C. Humanities (9 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) | | | | | 1. Elective: pag*, eng, wri, or hum | | | 1 | |
| COURSE: | 3 | | | | COURSE: WRI 207WICT | 3 | | | |
| | | | | | 2 Flootives | | | | |

| IV. COLLEGE DISTRIBUTION (33 cleuits) | κc | CK | GK | 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: AST, BIO, CHM, CSC, ENV, GEG (see note at right), GEL, MAR, MAT, NSE, or PHY | | | | |
| 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, CRJ, ECO, GEG (see note at right), HIS, INT, POL, PSY, SOC, SSE, 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: WRI 207WICT | 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 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: Information Technology (60 CR)

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

| Major Program: 57 credits | | | | |
|---------------------------------------|----|----|--|--|
| 1. Required Courses: 33 credits | CR | GR | | |
| CSC 125: Discrete Math for CS I | | | | |
| CSC 130: IT Fundamentals | | | | |
| CSC 135: Comp Sci I | | | | |
| CSC 136: Comp Sci II | | | | |
| CSC 242: Web Programming | | | | |
| CSC 253: IT Systems | | | | |
| CSC 311: Computer Networks | | | | |
| CSC 341: Information Security | | | | |
| CSC 356: Introduction to Database Sys | | | | |
| CSC 354: Software Engineering I | | | | |
| CSC 355: Software Engineering II | | | | |

| Concomitant Courses: 3 credits | | |
|---|-----|----|
| 1. Required Courses: 3 credits | CR | GR |
| MAT 105: College Algebra or above | | |
| MAT 140: Applied Stat Methods* | X | X |
| WRI 207: Writing for Workplace* | X | X |
| PHI 040: Intro to Ethics* | X | X |
| *accounted for in general education | | |
| | | |
| | | |
| 2. Internship – optional (Gen Ed free elective) | CR | GR |
| CSC 280: Cooperative Internship I | 1-6 | |
| CSC 380: Cooperative Internship II | 1-6 | |

| 2. CS Elective Courses: 24 credits of additional CSC courses, number 125 or above and not previously used for above requirements. | CR | GR |
|---|----|----|
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Recommendations

Consider taking a Minor in an Application Domain such as Math, Entrepreneurial Leadership, Business, Psychology, Sociology, Biology, or any Science.

Consider taking a second speech course in General Education II E

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

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.

| 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 | 57 | | | | | |
| c. Concomitant Courses | 3 | | | | | |
| 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:Information Technology – Five Year BS/MS Undergraduate Program | | | |
|---|-------------|--|--|--|--|
| 30 credits MS in Computer Science:Information Technology Additional 12 credits of 400-level CSC courses counted toward the 120 credits for the BS above the 45 credimit for the undergraduate degree counted for the MS 138 credits Total credits needed to receive both the BS and MS in Computer Science:Information Technology | | MS in Computer Science:Information Technology | | | |
| | | Additional 12 credits of 400-level CSC courses counted toward the 120 credits for the BS above the 45 credit limit for the undergraduate degree counted for the MS | | | |
| | | Total credits needed to receive both the BS and MS in Computer Science :Information Technology | | | |

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

Undergraduate admission to the Combined BS/MS Program in Computer Science: Junior status (60 or more credits taken overall) and at least 24 CSC course credits with 3.00 GPA or higher and a B or better in CSC 125, 130, 135, 253 each

Degree Requirements for the Master of Science in Computer Science: Information Technology track

- 1. Candidates for the MS degree in Computer Science must complete a total of 30 credits. A candidate must complete all degree requirements for the MS within six (6) calendar years after his or her acceptance into 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 |
|-------------------------|---------------|
| Networking | 411, 512 |
| Web | 421, 464, 521 |
| Database | 456, 556 |
| IT Systems & Management | 540, 554 |
| Security | 441, 555 |

| Required: 3 credits | CR | Date |
|---|----|------|
| CSC 441: Advanced Information Security | | |
| | | |
| Foundational Courses: 15-27 credits | | |
| CSC 411: Networking I | | |
| CSC 421: Web-Based Software Design | | |
| CSC 456: Database I | | |
| CSC 464: Human Computer Interaction | | |
| CSC 512: Networking II | | |
| CSC 521: Advanced Web-Based Soft. Dev | | |
| CSC 543: Multiprocessing & Concurrent Prg | | |
| CSC 552: Advanced UNIX Programming | | |
| CSC 554: Project Management | | |
| CSC 556: Database II | | |
| | | |
| Optional Thesis: 0 or 6 credits | | |
| CSC 599: Thesis – 6 credits | | |

| Elective Courses: 0-6 credits | CR | Date |
|---|----|------|
| CSC 402: Data Structures II | | |
| CSC 415: Design & Analysis of Algors I | | |
| CSC 425: Compiler Design I | | |
| CSC 447: Artificial Intelligence I | | |
| CSC 480: Special Topics | | |
| CSC 520: Advanced Object Oriented Prog. | | |
| CSC 526: Compiler Design II | | |
| CSC 540: Engineering Enterprise OO Sys | | |
| CSC 548: Artificial Intelligence II | | |
| CSC 555: Applied Cryptography | | |
| CSC 580: Special Topics | | |
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| Program Code: GLASCSCIB | | |

Version Number: 2158

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