



Bachelor of Science COMPUTER SCIENCE

Advisement Form 2009-2010

Name _____ ID _____

Special Grade Requirement: A grade of C- or better is required in all pre-requisite courses in the major

	Un.	Instit.	Course	Units	Grade	Term	Prerequisites, GE & Comments
Lower Division Requirements (42-43 units)							
COMP 150 Object-Oriented Programming	4						Prereq: Programming experience; GE: B4
COMP 151 Data Structures and Program Design	4						Prereq: COMP 150
COMP 162 Computer Architecture and Assembly Language	3						Prereq: COMP 150
COMP 232 Programming Languages	3						Prereq: COMP 151 & 162
COMP 262 Computer Organization and Architecture	3						Prereq: COMP 151 & 162
MATH 150 Calculus I	4						Prereq: Passing score on Calculus Placement Exam or MATH 105; GE: B3
MATH 151 Calculus II	4						Prereq: MATH 150
MATH 230 Logic and Mathematical Reasoning	3						GE: A3, B3
MATH 240 Linear Algebra	3						Prereq: MATH 151
Science: Choose either (a) or (b)							
(a)							
PHYS 200 General Physics I	4						Prereq: MATH 150; GE: B1
PHYS 201 General Physics II	4						Prereq: PHYS 200; GE B1
	3-4						Choose a course from GE Section B2
(b)							
PHYS 200 General Physics I	4						Prereq: MATH 150; GE: B1
BIOL 200 Principles of Organismal and Population Biology	4						GE: B2
BIOL 212 Neurobiology and Cognitive Science	3						Prereq: BIOL 100 or 200 or 201; GE B2, E
Upper Division Requirements (40 units)							
Major Requirements (28 units)							
COMP 350 Introduction to Software Engineering	3						Prereq: COMP 232 & 262
COMP 362 Operating Systems	3						Prereq: COMP 262
COMP 447 Societal Issues in Computing	3						Prereq: Senior standing; GE: B4, D, INTD
COMP 454 Automata, Languages and Computation	3						Prereq: MATH 300
COMP 491 Capstone Preparation	1						Prerequisite: COMP 350, 362, & Senior standing
COMP 499 Capstone Project	3						Prereq: COMP 491; Repeatable by topic
MATH 300 Discrete Mathematics	3						Prereq: MATH 230
MATH 352 Probability and Statistics	3						Prereq: MATH 151
MATH 354 Analysis of Algorithms	3						Prereq: MATH 300 & some computer programming experience

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COMP 420 Database Theory and Design (or) COMP 464 Computer Graphic Systems and Design I	3						Prereq: COMP 350 Prereq: COMP 350 & MATH 240
Electives (12 units) Select a minimum of <u>12</u> units from courses listed below:							
COMP/PHYS/MATH 345 Digital Image Processing	3						Prereq: Consent of instructor; GE: B1, B4, INTD
COMP 351 Distributed Computing	3						Prereq: COMP 151
COMP 420 Database Theory and Design	3						Prereq: COMP 350 & MATH 240 <i>May not be taken if completed above</i>
COMP 421 Unix for Programmers	3						Prereq: COMP 350 & 362
COMP 424 Computer System Security	3						Prereq: COMP 350 & 362
COMP 425 Computer Game Programming	3						Prereq: COMP 429 & 464
COMP 429 Computer Networks	3						Prereq: COMP 232 & 362
COMP/PHYS/MATH 445 Image Analysis and Pattern Recognition	3						Prereq: COMP/PHYS/MATH 345 or consent of instructor; GE: B1, B4, INTD
COMP 451 Advanced Object-Oriented Programming	3						Prereq: COMP 350 & 362
COMP/MATH 452 Computational Bioinformatics	4						Prereq: Programming experience & statistics or consent of instructor
COMP 462 Embedded Systems	3						Prereq: COMP 350 & 362
COMP 464 Computer Graphic Systems and Design I	3						Prereq: COMP 350 & MATH 240; <i>May not be taken if completed above</i>
COMP 469 Artificial Intelligence/Neural Nets	3						Prereq: COMP 350 & 362
COMP 490 Topics in Computer Science	3						Prereq: Upper-division standing & instructor's consent; Repeatable by topic
COMP 492 Internship	1-3						Prereq: Upper-division standing & program approval of written proposal; Repeatable by topic
COMP 494 Independent Research	1-3						Prereq: Upper-division standing & program approval of written proposal; Repeatable by topic
COMP 497 Directed Studies	3						Prereq: Program approval of written proposal; Repeatable by topic
ENGL 482 Technical Writing	3						Prereq:: ENGL 330
MATH 429 Operations Research	3						Prereq: MATH 329 or 352 or equivalent
MATH 448 Scientific Computing	3						Prereq: MATH 151 & MATH 350 or COMP 151; GE: B3, B4, INTD

Additional University Graduation Requirements

9 Units Upper Division Interdisciplinary GE at CSUCI (courses numbered 330-349 or 430-449)

Course 1 (in major) COMP 447 Course 2 _____ (may choose COMP 345, 445, MATH 448) Course 3 _____ (outside major)

American Institutions Requirements: US History _____ State and Local Gov't _____
(choose HIST 270, 271, 272, 275 or 350) (choose POLS 150)

Students must receive a grade of C or better in the Language and Multicultural Requirements

Language Requirement: GE C3a _____
(one semester of college level language)

Multicultural Requirement: GE C3b _____

Minimum total units to graduate: 122 of which 40 must be upper division. Please see catalog for a complete list of graduation requirements.

Advisor _____

Date Completed: _____