## Computer Science (Computer Information Systems) 2013-15 Advising Checklist Quarter Units: 180 Core Units: 112

Lower Division Core (26)	
CMPS 150 – Introduction to Unix (1) (or CMPS 215 – Unix Programming Environment)	
CMPS 211 – Internet Programming and Web Design	
CMPS 221 – Programming Fundamentals (grade of C- or better)	
CMPS 222 – Object-Oriented Programming (grade of C- or better)	
CMPS 223 – Data Structures and Algorithms (grade of C- or better)	
CMPS 295 – Discrete Structures	
Upper Division Core (51)	
CMPS 312 – Algorithm Analysis and Design	
CMPS 335 – Software Engineering	
CMPS 342 – Database Systems	
CMPS 350 – Programming Languages	
CMPS 356 – Artificial Intelligence	
CMPS 360 – Operating Systems	
CMPS 371 – Computer Graphics	
CMPS 376 – Computer Networks	
CMPS 394 – Client, Server, Internet, and Hand-held Device Programming	
CMPS 490A – Senior Project I (3)	
CMPS 490B - Senior Project II (3)	
Advanced Elective Course (choose from CMPS 435, 442, 450, 456, 460, 471, 476) (5)	
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General Electives (20)	
Choose from CMPS 215, 216, 224, or any other 300-/400-level CMPS or ECE course.	
A minor may be used to offset some elective units with consent of a department advisor.	
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Cognate Requirements (15)	
MATH 140 – Elementary Statistics (or MATH 201 or higher)	
MATH 192 – Pre-calculus II (or MATH 201 or higher)	
PHIL 316 – Professional Ethics	
Additional Units (any university units) (8-13)	
General Education and University Requirements (50-57)	
Foreign Language Requirement – 2 yrs. high school or 1 college course	
CSUB 101 $(2)$	
A1 – Recommend COMM 108 (grade of C or better)	
$\underline{\hspace{1cm}}$ A2 – ENGL 110 (grade of C or better)	
A3 (grade of C or better)	
B1/B3	
B2/B3 – Waived for Computer Science majors	
B4 – Satisfied by MATH 140, MATH 192, or MATH 201 or higher with grade of C or better	
C1	
C2, C4, or C5	
C3 – US History double-counts for C3 for Computer Science majors	
US History for American Institutions (AI) requirement	
D3/Government for AI requirement – Recommend PLSI 101	
Area D $-5$ units waived for Computer Science majors	
D1, D2, D4, or D5	
Theme 1 – Met by completing CMPS 490A & B	
Theme 2 – Satisfied by PHIL 316	
Theme 3 – Waived for Computer Science majors	
Gender, Race, and Ethnicity (GRE) (3-5)	
GWAR – Pass exam or take course (COMM 304 – Technical Writing recommended for course)	

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