Computer Science (Traditional CS) 2013-15 Advising Checklist Quarter Units: 180 Core Units: 124

Lower Division Core (26)
CMPS 150 – Introduction to Unix (1) (or CMPS 215 – Unix Programming Environment)
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 224 – Assembly Language Programming
CMPS 295 – Discrete Structures
Upper Division Core (51)
CMPS 312 – Algorithm Analysis and Design
ECE 320 – Digital Circuits
CMPS 321 – Computer Architecture
CMPS 335 – Software Engineering
CMPS 342 – Database Systems
CMPS 350 – Programming Languages
CMPS 356 – Artificial Intelligence
CMPS 360 – Operating Systems
CMPS 376 – Computer Networks
CMPS 490A – Senior Project I (3)
CMPS 490B - Senior Project II (3)
Upper Division Electives (select 2 400-level courses or 1 400-level and CMPS 371) (10)
opper Division Electives (select 2 400-level courses of 1 400-level and OMI 5 571) (10)
Cognate Requirements (42)
MATH 201 or 231 – Calculus I (grade of C- or better)
MATH 201 of 231 Calculus I (grade of C- or better) MATH 202 or 232 – Calculus II (grade of C- or better)
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MATH 203 or 233 – Calculus III (grade of C- or better)
MATH 230 or 330 – Linear Algebra
MATH 340 – Probability Theory
PHYS 221 – Classical Physics I - Mechanics (6)
PHYS 222 – Classical Physics II - Thermodynamics and E&M (6)
PHIL 316 – Professional Ethics
Additional Units (any university units) (0-6)
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General Education and University Requirements (45-52)
Foreign Language Requirement – 2 yrs. high school or 1 college course
CSUB 101 (2)
A1 – Recommend COMM 108 (grade of C or better)
A2 – ENGL 110 (grade of C or better)
A3 (grade of C or better)
B1/B3 – Satisfied by PHYS 221
B2/B3 – Waived for Computer Science majors
B4 – Satisfied by MATH 201 or MATH 231 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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