# COMPUTER SCIENCE (CIS TRACK) 2013-15 DEGREE REQUIREMENT CHECKLIST <br> QUARTER UNITS: 180 CORE UNITS: 113 

Lower Division (26)
__ CMPS 211 Internet Programming and Web Design
__ CMPS 150 (1) and CMPS 221 Programming Fundamentals
__ CMPS 222 Object-Oriented Programming
___ CMPS 223 Data Structures and Algorithms
$\qquad$ CMPS 295 Discrete Structures

Upper Division required (52)
$\qquad$ CMPS 312 Algorithm Analysis and Design
$\qquad$ CMPS 335 Software Engineering CMPS 342 Database Systems CMPS 350 Programming Languages CMPS 356 Artificial Intelligence CMPS 360 Operating Systems CMPS 371 Computer Graphics
$\qquad$ CMPS 376 Computer Networks
$\qquad$ CMPS 394 Java: Client, Server, and Internet Programming
$\qquad$ CMPS 490A Senior Project I (3) and CMPS 490B Senior Project II (4)

Advanced Elective (select 1 course from: CMPS 435, 442, 450, 456, 460, 471, or 476) (5)

Other Electives (select 20 units of approved courses) (20)
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Additional Units (select 10 units of general university courses) (10)

Cognate Requirements (10)
___ MATH 140 Elementary Statistics (satisfies B4), or a higher-level (e.g. MATH 20x) math course
__ MATH 192 Pre-Calculus II, or a higher-level (e.g. MATH 20x) math course
Lower Division General Education (47)
___ CSUB 101 (2)
A1 - COMM 108
A2 - ENGL 110

- A3
__ B1,B3
B2 - waived by NSME B-Comm (04-19-2013)
$\mathrm{C} 1, \ldots \mathrm{C} 2$ C3 - doublecounted by US History - CARS (03-21-2013)
$\qquad$ US History Requirement Area D - 5 units waived by CARS (03-21-2013)
$\qquad$ D2 ECON 201 or ECON 202
$\qquad$ D3 PLSI 101 (also satisfies State Government Requirement)

Upper Division General Education (10)
Theme I - substituted by CMPS 490A\&B - Senior Project I\&II above
$\qquad$ Theme II - PHIL 316 (Ethics)
Theme III - waived by CARS (03-21-2013)
Gender, Race, and Ethnicity (GRE)
COMM 304 Recommended or pass GWAR exam (0)

