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|  | **Computer Science (Traditional) 2013-15 Catalog Advising Checklist** | |  | Name: |  |
|  | **Quarter Units: 180** | **Core Units: 124** |  | ID #: |  |

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| Lower Division Core (26) | | |  |
|  |  | CMPS 150 - Introduction to Unix (1) [see Q2S notes] | Advising Notes: |
|  |  | CMPS 221 - Programming Fundamentals (grade of C- or better) [see Q2S notes] |  |
|  |  | CMPS 222 - Object-Oriented Programming (grade of C- or better) [see Q2S notes] |
|  |  | CMPS 223 - Data Structures and Algorithms (grade of C- or better) [see Q2S notes] |
|  |  | CMPS 224 - Assembly Language Programming [CMPS 2240] |
|  |  | CMPS 295 - Discrete Structures [CMPS 2120] |
| Upper Division Core (51) | | |
|  |  | CMPS 312 - Algorithm Analysis and Design [CMPS 3120] |
|  |  | ECE 320 - Digital Circuits [ECE 3200 or Substitute with CMPS 3140 or CMPS 3640] |
|  |  | CMPS 321 - Computer Architecture [CMPS 3240] |
|  |  | CMPS 335 - Software Engineering [CMPS 3350] |
|  |  | CMPS 342 - Database Systems [CMPS 3420] |
|  |  | CMPS 350 - Programming Languages [CMPS 3500] |
|  |  | CMPS 356 - Artificial Intelligence [CMPS 3560] |
|  |  | CMPS 360 - Operating Systems [CMPS 3600] |
|  |  | CMPS 376 - Computer Networks [CMPS 3620] |
|  |  | CMPS 490A - Senior Project I (3) [CMPS 4910] |
|  |  | CMPS 490B - Senior Project II (3) [CMPS 4928] |
| Upper Division Electives (10) | | |
| Select two 400-level courses or one 400-level course and CMPS 371 [CMPS 3480] | | |
|  |  | CMPS |
|  |  | CMPS |
| Cognate Requirements (42) | | |
|  |  | MATH 201 or 231 - Calculus I (grade of C- or better) [see Q2S notes] |
|  |  | MATH 202 or 232 - Calculus II (grade of C- or better) [see Q2S notes] |
|  |  | MATH 203 or 233 - Calculus III (grade of C- or better) [see Q2S notes] |
|  |  | MATH 230 or 330 - Linear Algebra [MATH 2610] |
|  |  | MATH 340 - Probability Theory [MATH 3200] |
|  |  | PHYS 221 - Classical Physics I - Mechanics (6) (grade of C- or better) [PHYS 2210] |
|  |  | PHYS 222 - Classical Physics II - Thermo/EM (6) (grade of C- or better) [PHYS 2220] |
|  |  | PHIL 316 - Professional Ethics [PHIL 3318] |
| 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 - Introduction to CSUB (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 | Q2S Transition Notes: |
|  |  | B4 - Satisfied by MATH 201 or MATH 231 or higher with grade of C- or better | Programming sequence:  CMPS 2010 is CMPS 150+221+Half 222  CMPS 2020 is Half CMPS 222+All 223  Calculus sequence for CMPS:  Completion of MATH 2510 & 2520 or MATH 2310 & 2320 is sufficient for the Computer Science MATH 201-203 or MATH 231-233 requirement  (see advisor if you have partially completed calculus under quarters for a Q2S transition plan)  GE: Go to https://www.csub.edu/ge |
|  |  | 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 get C- or better in course (COMM 304 - Tech. Writing recommended for course) |