

**Computer Engineering 2013-15 Catalog Advising Checklist**  
**Quarter Units: 180**                      **Core Units: 133**

Name: \_\_\_\_\_

ID #: \_\_\_\_\_

Lower Division Core (24)

- \_\_\_\_\_ ECE 160 - Introduction to Engineering (3) [ECE 1618+1628]
- \_\_\_\_\_ CMPS 150 - Introduction to Unix (1) [see Q2S notes]
- \_\_\_\_\_ CMPS 221 - Programming Fundamentals (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 (41)

- \_\_\_\_\_ ECE 304 - Signals and Systems I [ECE 3040]
- \_\_\_\_\_ ECE 307 - Analog Circuits [ECE 3070]
- \_\_\_\_\_ ECE 320 - Digital Circuits [ECE 3200]
- \_\_\_\_\_ CMPS 321 - Computer Architecture [CMPS 3240]
- \_\_\_\_\_ ECE 322 - Digital Design with VHDL [ECE 3220]
- \_\_\_\_\_ CMPS 360 - Operating Systems [CMPS 3600]
- \_\_\_\_\_ ECE 420 - Embedded Systems [ECE 3250]
- \_\_\_\_\_ ECE 490A - Senior Project I (3) [ECE 4910]
- \_\_\_\_\_ ECE 490B - Senior Project II (3) [ECE 4928]

Upper Division Electives [select 1 course from each area below] (15)

- \_\_\_\_\_ Signal Processing/Communication: ECE 422 or 423 or 425 or 426
- \_\_\_\_\_ Robotics/Embedded Systems/Control: ECE 457 or 432
- \_\_\_\_\_ Computer Vision/Image Processing: ECE 446 or 447

Cognate Requirements (58)

- \_\_\_\_\_ 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 204 or 234 - Calculus IV [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]
- \_\_\_\_\_ PHYS 223 - Optics and Modern Physics (6) [PHYS 2230]
- \_\_\_\_\_ PHYS/ENGR 207 - Electric Circuits (grade of C- or better) [ENGR/ECE/PHYS 2070]
- \_\_\_\_\_ PHIL 316 - Professional Ethics [PHIL 3318]

Additional Units (any university units) (0-1)

General Education and University Requirements (40-47)

- \_\_\_\_\_ 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 - Waived for Computer Engineering majors
- \_\_\_\_\_ B1/B3 - Satisfied by PHYS 221
- \_\_\_\_\_ B2/B3 - Waived for Computer Engineering 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 Engineering majors
- \_\_\_\_\_ US History for American Institutions (AI) requirement
- \_\_\_\_\_ D3/Government for AI requirement - Recommend PLSI 101
- \_\_\_\_\_ Area D - 5 units waived for Computer Engineering majors
- \_\_\_\_\_ D1, D2, D4, or D5 - Recommend ECON 201 or 202 (Economics is part of FE exam)
- \_\_\_\_\_ Theme 1 - Met by completing ECE 490A & B
- \_\_\_\_\_ Theme 2 - Satisfied by PHIL 316
- \_\_\_\_\_ Theme 3 - Waived for Computer Engineering 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)

Advising Notes:

Q2S Transition Notes:

- Programming sequence:  
 CMPS 2010 is CMPS 150+221+Half 222  
 CMPS 2020 is Half CMPS 222+All 223
- Signals and Systems:  
 ECE 3040 is both ECE 304 and ECE 330
- Calculus sequence:  
 Completion of MATH 2510-2530 or  
 MATH 2310-2330 is equivalent to MATH  
 201-204 or MATH 231-234 (see advisor  
 if partially completed calculus under  
 quarters for a Q2S transition plan)
- GE: Go to <https://www.csub.edu/ge>