

**COMPUTER ENGINEERING 2011/13 DEGREE (180 UNITS) REQUIREMENT CHECKLIST**

Lower Division (21)

- \_\_\_\_\_ CMPS 150 (1) **and** CMPS 221 Programming Fundamentals
- \_\_\_\_\_ CMPS 223 Data Structures and Algorithms
- \_\_\_\_\_ CMPS 224 Assembly Language Programming
- \_\_\_\_\_ CMPS 295 Discrete Structures

Upper Division required (40)

- \_\_\_\_\_ CENG 304 Linear Systems
- \_\_\_\_\_ CENG 307 Analog Circuits
- \_\_\_\_\_ CENG 320 Digital Circuits
- \_\_\_\_\_ CMPS 321 Computer Architecture
- \_\_\_\_\_ CENG 322 Digital Design with VHDL
- \_\_\_\_\_ CMPS 360 Operating Systems
- \_\_\_\_\_ CENG 420 Embedded Systems
- \_\_\_\_\_ CENG 490 Senior Project in Computer Engineering

Upper Division CENG Electives (two courses: select 1 course from each of two different areas below) (10)

- \_\_\_\_\_ CENG 422 Digital Signal Processing **or** CENG 423 Digital Communications
- \_\_\_\_\_ CENG 457 Robotics **or** CENG 432 Instrumentation, Control and Data Acquisition
- \_\_\_\_\_ CENG 446 Image Processing **or** CENG 447 Computer Vision

Cognate Requirements (43)

- \_\_\_\_\_ MATH 201 Calculus I (also satisfies B4)
- \_\_\_\_\_ MATH 202 Calculus II
- \_\_\_\_\_ MATH 203 Calculus III
- \_\_\_\_\_ MATH 204 Calculus IV
- \_\_\_\_\_ PHYS 221 Classical Physics I - Mechanics (6 – also satisfies B1, B3)
- \_\_\_\_\_ PHYS 222 Classical Physics II - Thermodynamics and E&M (6)
- \_\_\_\_\_ PHYS 223 Optics and Modern Physics (6)
- \_\_\_\_\_ PHYS/ENGR 207 Electric Circuits

Lower Division General Education (50)

- \_\_\_\_\_ A1 - COMM 108
- \_\_\_\_\_ A2 - ENGL 110
- \_\_\_\_\_ A3 - waived at the time the CENG major takes CMPS 295
- \_\_\_\_\_ B2 - BIOL 100
- \_\_\_\_\_ C1, \_\_\_\_\_ C2, \_\_\_\_\_ C3
- \_\_\_\_\_ US History Requirement
- \_\_\_\_\_ D1
- \_\_\_\_\_ D2 ECON 202 (Macroeconomics)
- \_\_\_\_\_ D3 PLSI 101 (also satisfies State Government Requirement)

Upper Division General Education and University Electives (16)

- (Theme I - waived for CMPS and CENG majors)
- \_\_\_\_\_ Theme II - PHIL 316 (Ethics)
- \_\_\_\_\_ Theme III
- \_\_\_\_\_ Gender, Race, or Ethnicity (GRE)
- \_\_\_\_\_ University Elective (1)