COMPUTER ENGINEERING (EE CONCENTRATION) 2011/13 DEGREE 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 (50)

- CENG 304 Linear Systems
- CENG 306 Complex Analysis in Engineering
- CENG 307 Analog Circuits
- CENG 320 Digital Circuits
- CMPS 321 Computer Architecture
- CENG 322 Digital Design with VHDL
- CENG 330 Signals and Systems
- CMPS 360 Operating Systems
- CENG 420 Embedded Systems
- CENG 490 Senior Project in Computer Engineering

Upper Division CENG Electives (select 2 courses from one area and 1 course from remaining areas) (20)

- CENG 422 Digital Signal Processing or CENG 423 Digital Communications
- CENG 457 Robotics or CENG 432 Instrumentation, Control and Data Acquisition or CENG 434 Introduction to Control Theory
- CENG 446 Image Processing or CENG 447 Computer Vision

Cognate Requirements (48)

- MATH 201 Calculus I (also satisfies B4)
- MATH 202 Calculus II
- MATH 203 Calculus III
- MATH 204 Calculus IV
- MATH 330 Linear Algebra
- 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 (15)

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