COMPUTER ENGINEERING ELECTIVE LIST

Advanced Computer Engineering Elective: Choose 2 courses from the following list.
ECE 47100: Embedded systems
ECE 46300: Intro. to Computer Communication Networks
ECE 46800: Intr. to Compilers and Translation Engineering
Students may also use the 500-level version of any of these classes

Computer Engineering Elective: Choose 9 credit hours from the following list. At least 3 credit hours must be at or above 400-level.
Any ECE 300 or above courses, except ECE 32600 or ECE 32700
ECE 25500: Intr Electronic Analysis & Design
CSCI 35500: Introduction to Programming Languages
CSCI 43700: Introduction to Computer Graphics
CSCI 43800: Computer Graphics II
CSCI 44300: Database Systems

General Education Elective: See the separate list provided by ECE Department

Math/Science/Technical Elective: Choose 3 credit hours from the list of Math/Science Electives or the list of Technical Electives.

Math/Science Elective
MATH 33300: Chaotic Dynamical Systems
MATH 51000: Vector Calculus
MATH 51100: Linear Algebra with Applications
MATH 52500: Introduction to Complex Analysis
MATH 52700: Advanced Math. Eng. & Physics I
MATH 53000: Functions of a Complex Variable I
MATH 54400: Real Analysis and Measure Theory
BIOL K10100: Concepts of Biology I
BIOL K32400: Cell Biology
CHEM C10600: Principles of Chemistry II
CHEM C34100: Organic Chemistry
CHEM C36100: Phys. Chemistry of Bulk Matter
PHYS 31000: Intermediate Mechanics
PHYS 40000: Physical Optics
PHYS 52000: Mathematical Physics
PHYS 54500: Solid State Physics
BIOL K10300: Concepts of Biology II
CHEM C31000: Analytical Chemistry
CHEM C36000: Elementary Physical Chemistry
CHEM C36200: Phys. Chemistry of Molecules
PHYS 34200: Modern Physics
PHYS 40000: Quantum Mechanics
PHYS 53000: Electricity & Magnetism
PHYS 55000: Introduction to Quantum Mechanics
Any 300-level or above math/science course with prior written approval of students’ advisory committee

Technical Elective
Any non-required course from lists of Electrical Engineering Elective or Computer Engineering Elective or Advanced Computer Engineering Elective.
Students completing three or more 1-credit sessions of either
1. ECE C199, ECE C299, ECE C399, ECE C494, or ECE C499, or
2. ECE I199, ECE I299, ECE I399, ECE I494, or ECE I499,
may use these credits to satisfy the technical elective requirement.

ECE 32600: Engineering Project Management
CSCI 30000: Systems Programming
CSCI 48700: Artificial Intelligence
ME 20000: Thermodynamics I
ME 27400: Basic Mechanics II
ME 22200: Biomeasurements
CSCI 44100: Client-Server Database Systems (3 cr.)
ME 2xx00: Engineering Mechanics & Heat
ME 27200: Basic Mechanics I
ME 34400: Intro to Engineering Materials
BME 24100: Biomechanics
Any 200-level or above technical course with prior written approval of students’ advisory committee.

Restricted Elective: Choose 3 credit hours from any aforementioned elective lists. (effective Fall 2009)