

**COMPARISON OF REQUIRMENTS
FOR ELECTRICAL AND COMPUTER ENGINEERING MAJORS
for Fall 2007 (200810)**

Common Course Requirements

The General Education, Mathematics and Science, General Engineering, and Thematic Sequence requirements are the same.

Common EE Core Requirements (23 hrs)
18%

ECE 205 Electric Circuit Analysis I (3)
ECE 287 Digital Systems Design (4)
ECE 304 Electronics (3)
ECE 305 Electric Circuit Analysis II (3)
ECE 306 Signals and Systems (3)
ECE 387 Embedded Systems Design (4)
ECE 425 Digital Signal Processing (3)

Common CSA Core Requirements (12 hrs)
9.4%

CSA 174 Fundamentals of Programming
Problem Solving (3)
CSA 271 Object-Oriented Programming (3)
CSA 274 Data Abstraction and Data
Structures (3)
ECE/CSA 278 Computer Architecture (3)

Double Majors

EE and CE double majors must have a total of 18 technical elective credit hours and they can not use a required course in one major as an elective for the other major.

- If the double major is with MME or CSA then they only have to take 448 and 449 once.
- If the double major is with another major then both department/senior project courses are required.

Course Requirements That Differ

Electrical Engineering (EE)

Requires 9 elective credit hours

Required

ECE 325 Applied Electromagnetics (3)
ECE/MME 436 Control of Dynamic Systems (3)
ECE 453 Communication Systems (3)

Technical Elective Choices

CSA 283 Data Communication and Networks (3)
CSA 381 Operating Systems (3)
CSA 386 Computer Graphics (3)
ECE 414/514 Intro to VLSI Circuit Systems (3)
ECE 428/528 Real-time Digital Signal Processing (3)
ECE 461/561 Network Modeling & Performance (3)
ECE 470 Special Topics (3)
CSA 486 Intro. to Artificial Intelligence (3)
MME 311 Dynamics Modeling (3)

Computer Engineering (CE)

Requires 12 elective credit hours

Required

CSA 283 Data Communication and Networks (3)
CSA 381 Operating Systems (3)

Technical Elective Choices

CSA 348 Applied Software Engineering (3)
CSA 383 Client Server Systems (3)
CSA 385 Data Base Systems (3)
CSA 386 Computer Graphics (3)
CSA 464 Algorithm (3)
CSA 472 Software Engineering (3)
CSA 486 Intro. To Artificial Intelligence (3)
ECE 325 Applied Electromagnetics (3)
ECE 414/514 Intro to VLSI Circuit Systems (3)
ECE 428/528 Real-time Digital Signal Processing (3)
ECE/MME 436 Control of Dynamics Systems (3)
ECE 453 Communication Systems (3)
ECE 461/561 Network Modeling & Performance (3)
ECE 470 Special Topics (3)
MME 311 Dynamics Modeling (3)

