School of Engineering
COMPUTER ENGINEERING CURRICULUM CHART
1999-2000

Math 3 or placement
MATH 19A
Calculus
(F, W, S)

Math 19A
MATH 19B
Calculus
(F, W, S)

Math 19B
MATH 22 or 23A-B
Multivariable Calculus
(F, W, S)

Math 22 or Math 23A
MATH 27
Engineering Math
(F, W, S)

CMPE 16 and
Math 24 or 27
CMPE 107
Math Methods
(F, W, S)

CMPE 16, CMPS 12B,
Math 19B, #2X
CMPS 101
Abs. Data Types
(F, W, S)

CMPS 12A,
CMPS 12B
Data Structures
(F, W, S)

CMPE 16, CMPS 12B,
CMPS 12C/L
CMPE 12C/L,
CMPS 110
Computer Org.
(F, W, S)

CMPE 12C/L,
CMPS 101
CMPS 111
Operating Systems
(F, W, S)

CMPE 16
CMPE 100/100L
Logic Design
(F, W, S)

CMPS 12B
CMPE 185
Technical Writing
(F, W)

CMPS 12C/L,
CMPE 16
CMPE 110
Computer Architect.
(W, S)

CMPS 12C/L,
CMPE 100/100L
CMPE 121/121L
Microproc. Design
(F, W)

Design Project
Choose One

CHEM 1A or 1B
Gen Chem
(F) (F, W)

CMPE 121A/L,
CMPE 185
CMPE 126/126L
Adv. Logic Design
(F)

CMPE 121A/L,
CMPE 185, EE 70/70L or
CMPE 170/L
CMPE 123/123L
Adv. Microproc.
Sys. Design
(W, S)

ELECTRONICS
(Complete One)
CMPE 171/L 172/L 173/L
EE 70/70L
Analog Elec. Circuits
Hi Speed
(F) (W) (S)

Electives
From Approved List

Upper Division
CMPE/CMPS/EE

F, W, S

Engineering Science
Complete one of the following which is not used for another requirement:

☐ CMPE 108 (S)
Data Comp
☐ CMPE 152 (F)
Comp Networks
☐ CMPE 153 (W)
Signal Processing
☐ CMPE 157 (S)
Intro. Wireless Elect.

☐ CMPE 171/L (F, W)
Analog Electronics
☐ CMPE 172/L (W)
Linear/Nonlinear Circ.
☐ CMPE 173/L (S)
High Speed Digital
☐ CMPE 177 (F)
App. Graph Thy.

Most graduate courses are also acceptable with dept. approval

Depth in One Area of Humanities or Social Sciences (from Gen. Ed. requirements)
may be satisfied with two related lower-division courses, or one upper-division course.

Area: __________________ Course(s): (LD) __________/(LD) __________ (UD) __________

Faculty Adviser Approval: ________________________________

• = Course Prerequisite
# = any math course numbered in the 20s
** = Physics 5 Series (intended for Physics majors) can be substituted
## COMPUTER ENGINEERING
### DEGREE CURRICULUM
#### 1999-2000

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## APPROVED LIST OF UPPER DIVISION ELECTIVES

- **CMPE 106** DATA COMPRESSION
- **CMPE 123** ADVANCED MICROPROCESSOR SYSTEM DESIGN
- **CMPE 124** ADVANCED MICROPROCESSOR SYSTEM DESIGN LAB
- **CMPE 135** LOGIC DESIGN WITH VERILOG
- **CMPE 155** LOGIC DESIGN WITH VHDL LAB
- **CMPE 164** ADVANCED LOGIC DESIGN
- **CMPE 187** COMPUTER-AIDED SYNTHESIS OF VLSI CIRCUITS
- **CMPE 182** INTRODUCTION TO COMPUTER NETWORKS
- **CMPE 193** SIGNAL PROCESSING
- **CMPE 171** ANALOG ELECTRONICS
- **CMPE 171L** ANALOG ELECTRONICS LAB
- **CMPE 172** ANALOG N/NO LINEAR CIRCUITS
- **CMPE 172L** ANALOG N/NO LINEAR CIRCUITS LAB
- **CMPE 173** HIGH-SPEED DIGITAL DESIGN
- **CMPE 173L** HIGH-SPEED DIGITAL DESIGN LAB
- **CMPE 177** APPLIED GRAPH THEORY/ALGORITHMS
- **CMPE 187** WIRELESS ELECTRONICS
- **CMPS 102** ANALYSIS OF ALGORITHMS
- **CMPS 103A** MATH METHODS OF SYSTEMS
- **CMPS 104** COMPILER DESIGN I
- **CMPS 104A** COMPILER DESIGN II
- **CMPS 104B** COMPILER DESIGN III
- **CMPS 105** GRAPHICS, GAME AND STRUCTURAL
- **CMPS 106** ADVANCED PROGRAMMING
- **CMPS 112** COMPARATIVE PROGRAMMING LANGUAGES
- **CMPS 115** SOFTWARE METHODOLOGY
- **CMPS 120** COMPUTATIONAL MODELS
- **CMPS 123** COMPUTABILITY AND COMPLEXITY
- **CMPS 140** ARTIFICIAL INTELLIGENCE
- **CMPS 150** INFORMATION AND COMMUNICATION THEORY
- **CMPS 160** COMPUTER GRAPHICS
- **CMPS 180** DATABASE SYSTEMS
- **EE 105** ELECTROMAGNETIC FIELDS AND WAVES
- **EE 106** ELECTROMAGNETIC FIELDS AND WAVES LAB
- **EE 107** PROPERTIES OF MATERIALS
- **EE 108** PROPERTIES OF MATERIALS LAB
- **EE 146** DISCRETE DYNAMIC SYSTEMS

**STUDENT'S NAME:**
**STAFF ADVISOR:**
**FACULTY ADVISOR'S APPROVAL:**

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Advisory only. For specific requirements see Engineering Advisor. Course number, content, and prerequisites may have changed.