Baskin School of Engineering  
2001-2002  
Computer Engineering BS Curriculum Chart

**MATH**

- MATH 19A* Calculus
- MATH 19B* Calculus
- MATH 23A* MV Calculus
- MATH 23B MV Calculus
- ENGR 27/L* Engineering Math
- MATH 21* Linear Algebra
- MATH 24* Differential Equations
- CMPE 16* Discrete Math
- CMPE 107 Stochastic

**CORE COURSES**

- CMPS 12A* Programming
- CMPS 12B* Data Structures
- CMPS 101* Algorithms
- CMPE 12C/L* Computer Org
- CMPE 100/L* Digital Logic
- CMPE 110* Computer Arch
- CMPE 121/L* Micro Systems
- CMPE 185 Tech Writing
- EE 70/L* Electronics

**SCIENCE**

- **Physics**
  - PHYS 5B/M Waves
  - PHYS 5D Heat
- **Chemistry**
  - CHEM 1B/M General Chemistry
  - CHEM 1C/N General Chemistry
- **Earth Science**
  - EART 10/L Geo Principles
  - EART 1xx (not 111)
- **Biology**
  - CHEM 1B/M General Chemistry
  - BIOL 20A OR BIOL 21A Cell & Molecular

**SPECIALTY**

**System Programming**

- CMPS 111 OS
- CMPS 104A Compilers I
- CMPS 104B Compilers II
- CMPS 115 Software Methods
- Upper Division Elective from Approved List

**Computer Systems**

- CMPS 111 OS
- CMPE 125/L HDL
- Upper Division Elective from Approved List
- CMPS 123/L (Adv Micro) OR
- CMPE 126/L (Adv Logic) OR
- SENIOR THESIS

**Networks**

- CMPS 111 OS
- CMPE 150/152 Networks
- EE 103 Signals & Systems
- EE 151 Communication
- CMPE 220 Comp Networks
- Upper Division Elective from Approved List
- CMPS 155/L Network Project
- CMPE 155/L OR SENIOR THESIS

**Digital Hardware**

- EE 171/L Analog
- CMPE 172/L Circuits
- CMPE 173/L High Speed
- Upper Division Elective from Approved List
- CMPE 123/L Adv Micro
- CMPE 126/L Adv Logic
- CMPE 125/L HDL Design
- SENIOR THESIS

**Project portfolio (3 projects and narrative statement), exit survey, and interview**

*Requirements for the Minor in Computer Engineering are indicated with an asterisk.*
Approved List of Upper Division Electives

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- AMS 146 Discrete Dynamical Systems
- AMS 147 Computational Methods and Applic.
- AMS 156 Linear Statistical Models
- AMS 162 Design and Anal of Comp Sim Expsnts
- CMPE 108 Data Compression
- CMPE 113 Parallel Programming
- CMPE 117 Embedded Software
- CMPE 118 Introduction to Mechatronics
- CMPE 123/L Adv. Micro. System Design
- CMPE 125/L Logic Design with Verilog
- CMPE 126/L Adv. Logic Design
- CMPE 127 Comp.-Aided Synth. of VLSI
- CMPE 130/152 Intro. to Computer Networks
- CMPE 151 Network Administration
- CMPE 152 Analysis & Design Comm. Protocols
- CMPE 154 Data Communications
- CMPE 155 Computer Networks Project
- CMPE 156/L Network Programming
- CMPE 265A & CMPE 265B Special Topics in Image Processing
- CMPS 102 Analysis of Algorithms
- CMPS 104A Compiler Design I
- CMPS 104B Compiler Design II
- CMPS 109 Advanced Programming
- CMPS 111 Operating Systems
- CMPS 112 Comparative Prog. Langs.
- CMPS 115 Software Methodology
- CMPS 116 Software Design Project
- CMPS 122 Computer Security
- CMPS 128 Distributed Systems
- CMPS 129 Data Storage Systems
- CMPS 130 Computational Models
- CMPS 132 Computability and Compl
- CMPS 140 Artificial Intelligence
- CMPS 160/L Computer Graphics
- CMPS 161/L Visualization & Compt. Animation
- CMPS 180 Database Systems
- CMPS 181 Database Systems II
- CMPS 183 Hypermedia and the Web
- CMPS 190X Methods of Cryptography
- EE 103 Signals and Systems
- EE 105/127 & 128 Interdis. System Design Project I/II
- EE 130/L Optoelectronics & Photonics
- EE 135/136 Elect. Fields and Waves
- EE 136 Engr. Electromagnetics
- EE 145/L Properties of Materials
- EE 151 Communications Systems
- EE 153 Signal Processing
- EE 154 Feedback Control Systems
- EE 171/L Analog Electronics
- EE 178 Device Electronics
- ISM 206 Optimization Theory and Appl.

Any 5-Credit CS, CE, or EE Graduate Course
CMPE 265A & CMPE 265B Special Topics in Image Processing
At most, one elective may be substituted by an upper-division individual or field study (CMPE, CMPS, EE 193 or 198).

Student’s Name:
Staff Advisor:

Watch for CEFULs: CE Faculty-Undergraduate Lunches, regularly scheduled throughout the year, CE’s free lunch program.