# COMPUTER ENGR. & COMPUTER SCI.

### FIRST YEAR

**Fall Semester**
- WRIT 150
- MATH 125 (GE F)
- EE 109L
- CSCI 103
- ENGR 102

**Spring Semester**
- PHYS 151L (GE E)
- MATH 126 or MATH 129
- CSCI 104L
- CSCI 170
- Optional Elective

### SECOND YEAR

**Fall Semester**
- PHYS 152L
- MATH 226 or MATH 229
- CSCI 201L
- EE 250
- Optional Elective

**Spring Semester**
- GE C
- MATH 225
- CSCI 270
- EE 354L
- Optional Elective

### THIRD YEAR

**Fall Semester**
- GE A
- EE 364 or MATH 407 or MATH 226
- WRIT 340
- EE 457
- Optional Elective

**Spring Semester**
- GE B
- TECH. ELECTIVE I
- CSCI 350
- GE D
- Optional Elective

### FOURTH YEAR

**Fall Semester**
- GE B
- TECH. ELECTIVE II
- CSCI 353
- EE 451L or EE 454L or EE 477L
- Required Elective

**Spring Semester**
- GE C
- EE 451L or EE 454L or EE 477L
- CSCI 401 or CSCI 404 or ITP 466 or EE 459
- Required Elective

### MATHEMATICS (20 UNITS)
- MATH 125: Calculus I
- MATH 126 or 129: Calculus II
- MATH 226 or 229: Calculus III
- MATH 233: Linear Algebra & Diff. Equations
- EE 364: Intro to Probability & Statistics

### PHYSICS (8 UNITS)
- PHYS 151L: Mechanics and Thermodynamics
- PHYS 152L: Electricity and Magnetism

### GENERAL EDUCATION (32 UNITS)
- GE A: The Arts (1 Course)
- GE B: Humanistic Inquiry (2 Courses)
- GE C: Social Analysis (2 Courses)
- GE D: Life Sciences (1 Course)
- GE E: Physical Sciences (1 Course)
- GE F: Quantitative Reasoning (1 Course)
- GE G,H: Global Perspectives (2 Courses)*
- GESM: General Education Seminar (1 Course)*

### WRITING (17 UNITS)
- WRIT 150: Writing and Critical Reasoning
- WRIT 340: Advanced Writing

### ENGINEERING (65-66 UNITS)
- CSCI 103L: Introduction to Programming
- CSCI 104L: Data Structures & Object Oriented Design
- CSCI 170: Discrete Methods in Comp. Science
- CSCI 201L: Princ. of Software Development
- CSCI 270: Intro. to Algorithms & Theory of Computing
- CSCI 350: Introduction to Operating Systems
- CSCI 353: Introduction to Internetworking
- CSCI 401: Capstone: Design of Large Software Systems
- or 404: Capstone: Creating Your High-Tech Startup
- or EE 459L: Senior Design Project
- EE 109: Introduction to Embedded Systems
- EE 250: Distributed Systems for the Internet of Things
- EE 354L: Introduction to Digital Circuits
- EE 457: Computer Systems Organization
- EE 451: Parallel and Distributed Computation
- or EE 454L: Intro. to Sys. Using Microprocessors
- or EE 477L: MOS VLSI Circuit Design
- ENGR 102: Engineering Freshman Academy

### *SPECIAL NOTES*
- Courses with this symbol may be satisfied with AP, IB or A-Level exams. See page 22 for more information.
- GE: Engineering students are encouraged to satisfy GE G and GE H with a course that also satisfies a Core Literacy. GE H may be satisfied by exam. Additionally, your GESM course should be taken in categories A, B, C, or D only. See page 21 for more information and consult your advisor for detailed assistance.
- GRADE QUALIFIER: A grade of a C (2.0) or better is required for each of the core courses (CSCI 103, 170, 104 & 201). Courses with a grade of C- or below must be repeated; courses may only be retaken once with department approval.
- SENIOR DESIGN PROJECT: CSCI 401 or EE 459L
- TECHNICAL ELECTIVES: See approved tech elective list on CS webpage.