# COMPUTER ENGR. & COMPUTER SCI.

## FIRST YEAR

### FALL SEMESTER
- **WRIT 150**
- **MATH 125 (GE F)**
- **EE 109**
- **CSCI 103L**
- **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 209**
- **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**
- **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**
- **OPTIONAL ELECTIVE**

### SPRING SEMESTER
- **EE 451L or EE 454L or EE 477L**
- **GE C**
- **CSCI 401L or CSCI 404**
- **OPTIONAL ELECTIVE**
- **OPTIONAL ELECTIVE**

## MATHEMATICS (19-20 UNITS)
- MATH 125: Calculus I
- MATH 126 or 129: Calculus II
- MATH 226 or 229: Calculus III
- MATH 223: Linear Algebra & Diff. Equations
- EE 364: Intro to Probability & Statistics
- or MATH 407: Probability Theory

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

## ENGINEERING (64-66 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 209: Fundamentals of Digital Logic
- 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

## TECHNICAL ELECTIVES
- See approved tech elective list on CS webpage.

## SPECIAL NOTES
- Courses with this symbol may be satisfied with AP, IB or A-Level exams. See page 17 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 pp. 16-17 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.