Computer Science Major Requirements

**Core Courses**

- CSCI 100: Scientific Computing or CSCI 102: Multimedia Computing
- CSCI 110: Imperative Problem Solving
- CSCI 120: Data Structures and Algorithms
- MATH 111: Calculus I (or Math 108)
- MATH 211: Linear Algebra
- CSCI 200: Algorithm Analysis (and Junior Independent Study)

**Elective Courses**

- One of the following: CSCI 210 or CSCI 212
- One of the following: CSCI 220 or CSCI 222
- One of the following: CSCI 230 or CSCI 232
- Two of the following: CSCI 300, CSCI 310, CSCI 320, CSCI 330
- One of the following: MATH 215 or MATH 223

Computer Science Minor

- CSCI 100 (or 102); CSCI 110; CSCI 120; MATH 111 (or 108); MATH 211;
- one of CSCI 200, 230, or 232;
- and two more CSCI courses numbered at or above 200.

Offered EVERY semester

- CSCI 100: Scientific Computing (or CS 102, Fall only)
- CSCI 110: Imperative Problem Solving
- CSCI 120: Data Structures and Algorithms
- MATH 111: Calculus I (or Math 108, Spring only)
- MATH 211: Linear Algebra
- MATH 215: Transition to Advanced Mathematics

**FALL only**

- CSCI 210: Principles of Computer Organization*
- CSCI 212: Operating Systems**
- CSCI 220: Theory of Computation*
- CSCI 222: Programming Languages**
- CSCI 300: Computer Graphics*
- CSCI 320: User Interface Design**

  *Offered fall of odd years only (F2019, F2021)
  **Offered fall of even years only (F2020, F2022)

**SPRING only**

- CSCI 200: Algorithm Analysis
- CSCI 230: Software Engineering—Mobile Computing**
- CSCI 232: Software Engineering—Databases*
- CSCI 310: Machine Intelligence**
- CSCI 330: Computer Networking and Communication*
- MATH 223: Combinatorics and Graph Theory***

  *Offered spring of even years only (S2020, S2022)
  **Offered spring of odd years only (S2021, S2023)
  ***Offered F2019, then spring of odd years only (S2021, S2023)

- CS majors or minors may also minor in Statistical & Data Sciences, but no other major/minor combinations between these two fields are allowed.

- A score of 4 or 5 on the AP Computer Science A exam gives credit for CSCI 100. Students with AP credit who place into MATH 112 (Calculus 2) or higher may also skip CSCI 110 and start in 120.
Computer Science Major Prerequisites

- CS110
- CS120
- M215
- M211
- M223
- M111 or M107/108

A prerequisite can be satisfied by any one of the indicated courses.