



# Computer Science, B.S. *major*

## Integrated Emphasis

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Students cannot take 4000-level Computer Science courses until they have completed Calculus I and have earned a minimum grade point average of 2.25 in the required computer science courses they have completed.

Required Credits: 64  
Required GPA: 2.25

### I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- CS 1309 Problem Solving and Computation (3 credits)
- CS 2321 Computer Science I (4 credits)
- CS 2322 Computer Science II (4 credits)
- CS 2810 Computer Organization and Assembly Language Programming (3 credits)
- CS 3528 Data Structures and Algorithms (4 credits)
- CS 4390 Social, Ethical, and Professional Issues in Computing (2 credits)

### INTEGRATED EMPHASIS

#### 1. Systems Studies

SELECT 2 OF THE FOLLOWING COURSES:

- CS 2260 Linux Systems Programming (3 credits)
- CS 3507 Introduction to Databases (3 credits)
- CS 3560 Data Communications and Networks (3 credits)

#### 2. Application Development Techniques

SELECT 2 OF THE FOLLOWING COURSES:

- CS 3350 Event-Driven Programming in a Windows Environment (3 credits)
- CS 3360 Object-Oriented Software Development (3 credits)
- CS4361

#### 3. Required Electives

SELECT 3 SEMESTER CREDITS FROM COMPUTER SCIENCE COURSES AT THE 3000 AND/OR 4000 LEVELS. Internship credits cannot be applied to this elective requirement.

#### 4. Required Outside Courses

COMPLETE THE FOLLOWING COURSES:

- ENGL 3179 Elements of Electronic Rhetoric (3 credits)
- MATH 2471 Calculus I (5 credits)
- MATH3210
- SPCM 1100 Public Speaking (3 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- ENGL 2150 Technical Writing (3 credits)
- ENGL 3150 Writing In The Disciplines (3 credits)

#### 5. Required Minor or Second Major

Students pursuing this emphasis are required to complete the requirements of either a minor

(other than Computer Science) or second major (other than Computer Science, Professional Emphasis). This minor or major should represent an area of interest to the student and be chosen in consultation with the student's advisor.

Students who are not ready for Calculus will normally begin their mathematics course work in MATH 1470 Precalculus. Some students may need to successfully complete several mathematics courses before taking MATH 2471 Calculus I.