Computer Science, B.S. *major*
Professional Emphasis

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: 59
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)

PROFESSIONAL EMPHASIS

1. Required Computer Science Courses

COMPLETE THE FOLLOWING COURSE:

- CS4361

SELECT 2 OF THE FOLLOWING COURSES:

- CS3627
- CS 4298 Compiler Construction (3 credits)
- CS 4362 Software Engineering II (3 credits)
- CS 4840 Operating Systems (3 credits)

2. Required Mathematics Courses

COMPLETE THE FOLLOWING COURSES:

- MATH 2210 Discrete Mathematics (4 credits)
- MATH 2471 Calculus I (5 credits)
- MATH 2472 Calculus II (5 credits)

SELECT 1 OF THE FOLLOWING COURSES:

- MATH 3310 Linear Algebra (4 credits)
- STAT 3631 Probability And Statistics I (4 credits)

3. Required Electives

SELECT 12 SEMESTER CREDITS FROM COMPUTER SCIENCE COURSES AT THE 3000 AND/OR 4000 LEVELS. A maximum of 3 internship credits can be applied to this elective requirement.

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.