Duluth Campus

Computer Information Systems B.S.
Computer Science
Swenson College of Science and Engineering

- Program Type: Baccalaureate
- Requirements for this program are current for Fall 2012
- Required credits to graduate with this degree: 120
- Required credits within the major: 60
- Degree: Bachelor of Science

Professionals in the field of information systems work with information technology and must have sound technical knowledge of computers, software, and communications. Since they operate within an organizational framework, they must also understand business and business functions. The B.S. in computer information systems is a four-year program that includes formal courses in information technology (including system architecture, operating systems, interactive multimedia computing, and networking), management information systems, project organization and management, and business organizational functions. The program also includes supporting courses in communications, mathematics and statistics, and the economic, social, and ethical implications of computing. Goals of the learning process include the development of good software, communication skills, and the ability to work effectively in team environments. This program provides both the necessary foundational studies for students seeking entry-level positions in information systems and a strong basis for continued career growth.

This program is appropriate for students seeking a professional career in the computer information systems field. It is a multidisciplinary program that emphasizes the study of systems development methodology and technology for our rapidly changing information society.

Graduates are prepared for positions in the design and development of information systems as project managers, information systems center specialists, network administrators, and database administrators. This major is also appropriate preparation for information systems graduate programs or MBA professional programs.

The computer science minor and computer science applied minor are not available to computer information systems technology majors.

Program Delivery
This program is available:
- via classroom (the majority of instruction is face-to-face)

Admission Requirements
For information about University of Minnesota admission requirements, visit the Office of Admissions website.

General Requirements
The Board of Regents, on recommendation of the faculty, grants degrees from the University of Minnesota. Requirements for an undergraduate degree from University of Minnesota Duluth include the following:

1. Students must meet all course and credit requirements of the departments and colleges or schools in which they are enrolled including an advanced writing course. Students seeking two degrees must fulfill the requirements of both degrees. However, two degrees cannot be awarded for the same major.

2. Students must complete all requirements of the Liberal Education Program.

3. Students must complete a minimum of 120 semester credits.

4. At least 30 of the last 60 degree credits earned immediately before graduation must be awarded by UMD.

5. Students must complete at least half of their courses at the 3xxx-level and higher at UMD. Study-abroad credits earned through courses taught by UM faculty and at institutions with which UMD has international exchange programs may be used to fulfill this requirement.

6. If a minor is required, students must take at least three upper division credits in their minor field from UMD.

7. The minimum cumulative UM GPA required for graduation will be 2.00 and will include only University of Minnesota coursework. A minimum UM GPA of 2.00 is required in each UMD undergraduate major and minor. No academic unit may impose higher grade point standards to graduate.

8. Diploma, transcripts, and certification will be withheld until all financial obligations to the University have been met.

Program Requirements
Requirements for the B.S. in computer information systems include:

* Minor in business administration.

* Exit interview before graduation.

Core Courses (21 cr)
 CS 1521 - Computer Science II (5.0 cr)
 CS 2511 - Software Analysis and Design (4.0 cr)
 CS 3011 *{Inactive}*(4.0 cr)
 MIS 2201 - Information Technology in Business (3.0 cr)
 CS 1511 - Computer Science I [LE CAT] (5.0 cr)
   or CS 1581 - Honors: Computer Science I [LE CAT] (5.0 cr)

Advanced Courses (24 cr)
 CS 3111 - Computer Ethics [HUMANITIES] (4.0 cr)
 CS 3121 *{Inactive}*(4.0 cr)
 CS 3211 *{Inactive}*(4.0 cr)
 CS 3221 *{Inactive}*(4.0 cr)
 CS 4411 *{Inactive}*(4.0 cr)
 CS 3541 - Software Engineering (4.0 cr)

Additional Requirements (15 cr)
 Additional requirements also include completing a business administration minor for non-LSBE students.
 COMM 1112 - Public Speaking [LE CAT, COMM & LAN] (3.0 cr)
 MATH 1296 - Calculus I [LE CAT, LOGIC & QR] (5.0 cr)
 STAT 3611 - Introduction to Probability and Statistics (4.0 cr)
 Advanced Writing
  WRIT 3121 - Advanced Writing: Business and Organizations (3.0 cr)
   or WRIT 3130 - Advanced Writing: Engineering (3.0 cr)
   or WRIT 3150 - Advanced Writing: Science (3.0 cr)