

Integrated Bachelor and Master of Science Program in Computer Science



Computer scientists impact society through their work in many areas. The advancement of technology has transformed the way and speed with which individuals work, communicate, and exchange information. As we now depend daily on the stability and reliability of our technology systems, there is a very strong demand for individuals with a background in computer science. Graduate-level computer scientists are generally hired to work with the next generation of technology in areas such as computer systems, networking, database administration, operating systems, search engines, software engineering, and custom applications.

Integrated Degree Program

An integrated baccalaureate and master's degree program provides the opportunity for outstanding undergraduates to earn both degrees in five years. Typically, a baccalaureate degree requires four years to complete, and a master's degree requires an additional two years. However, the integrated degree programs are intended to be accomplished over a period of five years. In addition to earning both degrees a year early, the integrated programs may include additional opportunities to participate in a variety of experiential educational activities such as a master's project or thesis.

The requirements for the baccalaureate and master's components of the integrated program will remain the same as for the existing baccalaureate and master's programs. However, some advanced coursework completed while the student is at the baccalaureate level will also be used to satisfy requirements for the master's degree. In Computer Science, three of these "bridge" courses will contribute nine semester hours (SH) of credit toward the master's degree.

Admission Requirements

Undergraduate students may apply for admission to the integrated program after completing 60 SH of undergraduate coursework of which a minimum of 30 SH must be at WIU. Students must have both a minimum **cumulative** grade point average and a minimum GPA **in the major** of 3.25 for admission to the program. These GPAs must be maintained in order to register for bridge courses. Bridge courses may not be taken prior to the completion of 90 SH. Students must complete all bridge courses with a minimum grade of B.

Degree Requirements

Undergraduate students majoring in Computer Science will typically take bridge courses as part of the depth requirement for completion of the baccalaureate degree. Bridge courses should be selected in consultation with the student's academic advisor.

Upon completion of the baccalaureate degree, students have two options for completion of the master's degree: (1) the traditional research-based thesis option or (2) a more commercial project-oriented option. In each, students will take courses that stress projects, teamwork, and fundamental knowledge of computing.

Plan 1: The Thesis Option requires 27 SH of coursework and 6 SH of research. The final written thesis will be a formal document describing the research and will be prepared in accordance with the requirements of the School of Graduate Studies.

Plan 2: The Project Option requires 30 SH of coursework and 3 SH of directed study research. A final written report on the research project is required.

The successful completion of a final oral examination covering the research project or thesis is required to graduate.

Assistantship Opportunities

A limited number of teaching assistantships, which provide a monthly stipend and a tuition waiver, are available. Undergraduate and graduate GPAs, scholarship records, recommendations, and a personal statement provide the criteria for

Contact Information

Questions about the program:

School of Computer Sciences
(309) 298-1452
C-Science@wiu.edu
wiu.edu/computerscience

General admission questions:

School of Graduate Studies
(309) 298-1806 or (877) WIU GRAD
Grad-Office@wiu.edu
wiu.edu/grad

awarding assistantships. Teaching Assistants must maintain a 3.0 GPA, exhibit satisfactory progress toward their degrees, and satisfactorily perform their assigned duties in order to retain their assistantships.

Western Illinois University is an Affirmative Action and Equal Opportunity employer with a strong commitment to diversity. In that spirit, we are particularly interested in receiving applications from a broad spectrum of people, including, but not limited to, minorities, women, and individuals with disabilities. WIU has a non-discrimination policy that includes sex, race, color, sexual orientation, gender identity and gender expression, religion, age, marital status, national origin, disability, and veteran status.

Faculty Expertise

Department faculty have a variety of experiences, degrees, and research interests. The faculty have doctorates from such universities as Florida State University, Illinois Institute of Technology, Indian Institute of Science, Northwestern University, Southern Methodist University, SUNY Buffalo, University of Illinois, University of Iowa, and University of Western Ontario. Their current research interests are in the areas of artificial intelligence, computer architecture, databases, distributed processing, graphics, languages, networking, simulation, and software engineering.

Computer Facilities

At Western, you will have access to a large IBM mainframe and SUN computers, and we have large laboratories of the latest microcomputers and networking equipment. Our access to computing equipment and software is as good as any university in the United States. It is our goal to give you experience on a variety of computing equipment and the associated software so that you can judge which types of resources are best suited for the problems you encounter during your working career.



Student Activities

We strongly believe there is much more to education than bookwork and labwork, though these are important. We advise our students to become involved in other activities such as music, theatre, intramural sports, the student newspaper, student government, and, of course, the Computer Science Association (CSA). CSA is one place where you will be welcomed by others with similar interests and where you can learn about the latest advances through field trips and special presentations. We believe it is a vital part of your total education. Western's School of Computer Sciences also hosts a chapter of the National Honorary Computer Society, Upsilon Pi Epsilon. This society provides special recognition to outstanding Computer Science majors.



"As a Database Administrator for a Fortune 500 company, I have found that the Computer Science graduate program at WIU has provided me the tools necessary to be highly successful in the business world."

— Tim Hennings, MS, 1998