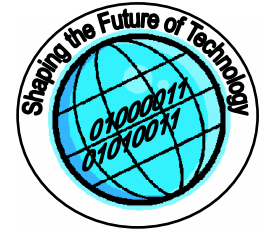




WESTERN  
ILLINOIS  
UNIVERSITY

# Graduate Studies Western Illinois University *Computer Science*



## Strengths of the Program

Excellent, dedicated faculty.

Course work in a variety of subjects.

Accessible and available computing equipment.

Preparation for research and commercial careers.

Assistantships offered.

A friendly, caring atmosphere

## Your Opportunities in Graduate Studies

At Western Illinois University, graduate study in computer science offers the exciting opportunity to work with faculty in their research in artificial intelligence; architecture, database, graphics, languages, networking, and systems design. You will also be able to access a variety of computer hardware and the best of current software.

Our goals for the master's program in computer science are to offer the knowledge you need to pursue careers in research and commercial environments, and to give you the ability to stay current in our dynamic and rapidly changing discipline. Our graduates have been successful in Ph.D. programs, in industrial research laboratories, in software and hardware design, and in middle and upper-level management for a variety of companies.

## The Three Options for the Master's Degree

The program offers three options for maximum flexibility in meeting your goals. You can choose from an all-course work option, a more

commercial project-oriented option, or the traditional research-based thesis option. In each, you will take courses that stress projects, teamwork, and a fundamental knowledge of computing. You will graduate with competence and confidence: the competence to do the job, and the confidence to know you can do it.

The Department of Computer Science offers three plans by which the Master of Science degree may be earned.

**Plan 1, the Thesis Plan,** requires 27 semester hours of course work and six hours of research. The final written thesis will be a formal document describing the research and will be prepared in accordance with requirements of the School of Graduate Studies.

**Plan 2, the Project Plan,** requires 30 semester hours of course work, and three hours of directed study research. A final written report on the research project is required.

**Plan 3, the All-Course-Work Plan,** requires 33 semester credit hours of course work.

In the All-Course-Work Plan, the chairperson of the student's graduate committee will normally be the chairperson of the Departmental Graduate Committee; students can petition the Departmental Graduate Committee for a change of chairperson.

If a student requires no remedial computer science course work, a total of 33 semester hours is required for the master's degree in computer science. The hours are distributed as follows:

- Core Courses
  - CS 410(G) Operating Systems: 3 s.h.
  - CS 470(G) Database Systems and Design: 3 s.h.
  - CS 460(G) Artificial Intelligence: 3 s.h.
  - CS 420(G) Networks: 3 s.h.
  - CS 560 Architecture: 3 s.h.
  - CS 465(G) Graphics: 3 s.h.

**Total Core Courses: 18 s.h.**

- Students must complete courses from a minimum of 2 of the following subject areas:

- Subject Area I: Operating systems:
  - CS 512 Advanced Operating Systems
  - CS 513 Topics in Operating Systems
- Subject Area II: Database:
  - CS 522 Advanced Database Design & Administration
  - CS 523 Topics in Database Systems
- Subject Area III: Artificial Intelligence:
  - CS 548 Advanced Artificial Intelligence
  - CS 549 Topics in AI
- Subject Area IV: Networking
  - CS 556 Advanced Computer Networks
  - CS 557 Topics in Computer Networks
- Subject Area V: Computer Architecture:
  - CS 561 Advanced Architecture
  - CS 562 Topics in Architecture
- Subject Area VI: Graphics
  - CS 566 Advanced Graphics
  - CS 567 Topics in Graphics

**Total Depth Courses: 6 s.h.**

- Thesis Plan
  - Core Courses: 18 s.h.
  - Subject Area Courses: 6 s.h.
  - CS Electives: 3 s.h.
  - CS 600 Research: 3 s.h.
  - CS 601 Thesis: 3 s.h.

**Total Program: 33 s.h.**
- Project Plan
  - Core Courses: 18 s.h.
  - Subject Area Courses: 6 s.h.
  - CS Electives: 6 s.h.
  - CS 599 Master's Project: 3 s.h.

**Total Program: 33 s.h.**
- All-Course-Work Plan
  - Core Courses: 18 s.h.
  - Subject Area Courses: 6 s.h.
  - CS Electives: 9 s.h.

**Total Program: 33 s.h.**

The successful completion of a final oral examination covering the research project or thesis, when those plans are chosen, is required to graduate.

A variety of programming languages and software packages are used at the graduate level. Graduate students are expected to have the ability to immediately learn these languages and packages as needed for their programs. There are also many opportunities for independent study, projects, and research.

## Computer Facilities

At WIU, you will have access to a large IBM mainframe and SUN computers and we have large laboratories of the latest microcomputers. Our access to microcomputers 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 its associated software, so that you can judge which type of equipment is best suited for the problems you encounter during your working career.

## The Faculty

Department faculty have a variety of experience, 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, 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.

## *Consider a Career in Computer Science at Western Illinois University!*

For more information, please contact [c-science@wiu.edu](mailto:c-science@wiu.edu) or call (309) 298-1452.